DOCUMENT RESUME

ED 251 259 RC 015 029

AUTHOR	Mountain, Karen; and Others
TITLE	The Rural Texas Environment: A Profile of Stressors.
INSTITUTION	Texas Univ., Austin. Center for Social Work Research.
SPONS AGENCY	Richardson (Sid W.) Foundation, Fort Worth, Tex.; Texas Univ., Austin. Hogg Foundation for Mental Health.
PUB DATE	Sep 84
NOTE	148p.; Also sponsored by the Hoblitzelle Foundation and Trull Foundation.
PUB TYPE	Reports - Research/Technical (143)
EDRS PRICE	MF01/PC06 Plus Postage.
DESCRIPTORS	Community Role; Delivery Systems; *Economic Factors; Family Problems; Health; Health Services; *Human Services; Individual Characteristics; *Rural Economics; *Rural Environment; *Rural Population; Social Support Groups; *Stress Variables
IDENTIFIERS	Impact; *Texas

ABSTRACT

Questionnaire data from 168 rural residents of Atacosa, Cass, Freestone, Scurry, and Upton counties, 153 health and human services providers and interviews with 125 residents of 25 rural communities identified and described stressors in the rural Texas environment. Rural Texans viewed economic problems (money, lack of jobs, poverty, working conditions, working hours, and the need to work more than one job) as the most frequent cause of stress. Economic problems also impacted negatively on other facets of their lives (increased family conflicts, alcohol consumption, crime rates, and breakup of multigenerational farm families). Illness or disability and lack of adequate health and human services also constituted significant sources of stress. Lack of education, a survey variable, was not viewed as stressful. Health providers cited gastrointestinal and cardiovascular disease, depression, anxiety, and headaches as commonly seen stress-related illnesses. Rural Texans utilized friends and relatives most frequently as social supports. Health and human service providers viewed themselves as a more frequently used source of support than did rural residents. North, south, and west Texans saw weather/climate, poverty, and lack of services as the top three community stressors, while east and central Texans cited poverty, lack of services, and differences between old-timers and newcomers as the top stressors. The interview form and survey questionnaires are appended. (NEC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED251259

RC 015029

NOV 1984
RECEIVED
ERIC/CRESS

The Rural Texas Environment: A Profile of Stressors

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
✓ This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Mary Walker
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

The Rural Texas Environment:
A Profile of Stressors

Prepared by:

Karen Mountain, R.N., M.S.N.
Project Coordinator

Mary Walker, R.N., Ph.D., F.A.A.N.
Program Director

Ralph DeAyala
Research Assistant

Yvonne D. Knudson
Administrative Secretary

Nolan Morrison
Assistant

Texas Rural Health Field Services Program
Center for Social Work Research
School of Social Work
The University of Texas at Austin
2609 University Avenue
Austin, TX 78712
(512)-471-9606

September 1984

The Rural Environment and Its Stressors: A Comprehensive Model for Stress Management is a project of the Texas Rural Health Field Services Program and is supported by the Hogg Foundation for Mental Health, the Trull Foundation, the Sid W. Richardson Foundation, the Hoblitzelle Foundation, and an anonymous Texas foundation.

ACKNOWLEDGMENTS

Many people have contributed their time, energy and resources to this study. Special thanks go to Scott Curtis, Work-Study Assistant, who spent many hours assisting with the literature search and data compilation. Andrea Davis, Texas Natural Resources Information System, was especially helpful in obtaining the census data used for statistical profiles and comparisons. Sylvia Cook, Bureau of Business Research, The University of Texas at Austin, extracted the typical county profiles and generously contributed her time and expertise. In addition, Dr. Bill Koch, Measurement and Evaluation Center, The University of Texas at Austin, shared his knowledge of instrument design and data analysis throughout the planning phases of the study. We are indebted to him and to the other experts who freely gave their comments and suggestions regarding the survey design and methodology of this study. Finally, a sincere thank you goes to all of the rural residents and health and human service providers who took the time to complete and return the survey, and who participated in the interviews. It is our hope that the results of this study will be beneficial to them and to their communities,

CONTENTS

CHAPTER 1: INTRODUCTION.. 1

CHAPTER 2: OVERVIEW OF STRESS.. 5
  Stress: A Working Definition... 5
  Life Events vs. Daily Hassles.. 7
  The Individual, The Family and The Community: Interaction for Adaptation.. 9
  Stress and the Rural Community... 10
  Statistical Description of Rural Texas................................. 12
  Definition of Terms.. 15
  Summary.. 16

CHAPTER 3: METHODOLOGY... 18
  Statement of Purpose... 18
  Population... 18
  Survey Design.. 22
  Interview Design... 22
  Data Collection.. 23
  Statistical Analysis... 25

CHAPTER 4: FINDINGS AND DISCUSSION.. 26
  Analysis of Survey Data.. 26
  Summary of Demographic Characteristics of Rural Resident Respondents.. 34
  Demographic Characteristics of Health/Human Service Provider Respondents...................................... 34
  Demographic Characteristics of the Survey Respondents' Communities.. 35
  Summary of Characteristics of Respondents' Communities................. 52
  Survey Respondents' Perceptions of Stress.............................. 53
  Respondents' Perception of Social Supports Utilized.................... 56
  Stressful Life Conditions.. 61
  Perceptions of Community Stress.. 76
  Summary of Survey Respondents' Perceptions of Stressors................ 92
  Analysis of Interview Data... 95
  Summary of Interview Data.. 102
  Summary.. 104

CHAPTER 5: CONCLUSIONS... 105
  Conclusions.. 107

REFERENCES... 110

APPENDICES

Appendix A: Criteria for Use In Determining The Typical Rural County
Appendix B: Map of Regions
Appendix C: Survey Questionnaires
Appendix D: Structured Interview Form

CHAPTER 1: INTRODUCTION

Life in rural Texas is generally believed to be serene and simple...a bucolic antidote to the stress of an urban existence. Although rural Texas living today is different from urban life, the fact remains that it is neither more simple nor less stressful.[1]

The results of a study on stressors in the environment of rural Texas are presented in this report. The primary objectives of this study were to verify the presence of stress in the lives of rural residents and to identify the specific conditions or groups of conditions which contribute to that stress. The underlying premise of the study was that through a better understanding of specific stressors, more effective stress management techniques could be developed and implemented to improve the delivery of health and human services to rural Texans.

Many Texans persist in the naive view of rural Texas as a place of languid lemonade summers and pastoral contentment. This perception fails to take into account the drug abuse, family violence, suicides, and teenage pregnancies which affect the rural environment as frequently as they do urban areas. With more poverty, less education, lower incomes, and shorter life expectancies than their urban counterparts, rural Texans must cope with higher accident rates and more chronic illness than urban dwellers.

The population of Texas is projected to grow by more than 6.5 million between 1980 and 2000. This growth will rank the state as the second most populous in the nation.[2] If current trends prevail the rural areas, which contain one third of the poor, one half of the ill-housed, and three fifths of those who receive inadequate medical attention, will continue to grow at a faster rate than ever before.[3] The changes brought about by this growth will continue to affect the rural environment and the daily lives of rural residents.

Recent research in the area of stress measurement has focused on the contrast between major life events and minor life hassles. The findings mark a significant transition in stress research. Indications are that while major life events such as the death of a spouse, marriage, and divorce do have long term effects, the everyday hassles encountered through interactions between an individual and his or her family and community have a much stronger impact on mental and physical health. In addition, an individual's response to hassles appears to be a better predictor of psychological and physical health than major life events.[4,5,6]

An individual's immediate environment comprises the arena in which his or her life takes place. As such, "the environmental setting can not only operate directly in the causation of stress but can also provide and withhold the resources people find necessary or useful to draw upon in coping."[4]

Stressors influencing family dynamics come both from within, i.e. past events, individual personalities, cultural, ethnic and religious beliefs, and from without. Examples of stressors contributing an external, or environmental, influence on family dynamics include economic change, drought, poverty, social disorganization, pollution, and access to health care.

Individuals, families and even communities in Texas "differ in how well they do in managing their ongoing day-to-day, hour-by-hour relationships with their environments, and there is reason to believe that these differences have much to do with the overall quality of their adjustment, including their health/illness, morale and adaptive functioning."[4] Yet little attention has been paid to the concept of rural stress and, as a result, the specific factors which create stress in rural Texas remain unexamined. Consequently, it is impossible to determine the extent to which specific problems such as crime, lack of health and human services, or poverty interplay with daily hassles to create problems in the rural environment. Rural concerns over symptoms of stress such as drug abuse, alcoholism, and domestic violence cannot be adequately addressed, nor can the implications for community mental health be evaluated.

"The ways people adapt to stress affect their psychological, physical, and social well-being"[7] and thus the quality of their lives. Because adaptation takes place on individual, family, and community levels, any approach to stress management must address the interaction among each of these levels of behavior. The integration and coordination of stress management techniques is essential to decrease maladaptive reactions to stress.

However, in order to predict rural health and human service concerns, interpret the impact of growth and change on the communities and develop specific stress management techniques, it becomes necessary to first identify the stressors specific to the rural environment and to validate these findings with existing statistical information.

To develop an understanding of the stressors in the environment of rural Texas it is necessary to identify the impact of stress on the essential triad: the individual, the family and the community. Through the identification and interpretation of specific stressful components of rural life, this study will develop a comprehensive profile of rural stressors. Chapter Two presents an overview of the stress literature with an emphasis on the components of stress and the factors which contribute to the nature of the response to a potentially stressful event. Additionally, stress in the rural community will be discussed, followed by a description of rural Texas. Chapter Three will detail the methodology of the study. Chapter Four reports the findings of the surveys and interviews, and Chapter Five presents the conclusions that can be drawn from the analysis of the data.

CHAPTER 2: OVERVIEW OF STRESS

Although much research has been done on different facets of stress, stress management, and coping, very little information exists on the stressors in the rural environment and specific conditions which are affecting the lives of rural Texans. This overview of stress will attempt to briefly summarize the available data, outlining the concept of stress, the types of events which can be stressful, and the interplay between the individual and the environment. In addition, stress and the rural community will be discussed and a profile of rural Texas will be presented, followed by definitions of terms used in the study.

Stress: A Working Definition

No matter who we are, what we do, or where we live, the stress of life is unavoidable. It is so much a part of our lives that virtually everyone is experiencing some degree of stress all the time. As life becomes faster paced and more complex it appears that it also becomes more stressful.[8-13]

We have heard a great deal about stress and many of us talk about it often, but what, really, is stress? It seems that stress has about as many definitions as there are articles written about it. It is a theoretical concept, a personal experience, and a physical phenomenon.[14-20] "However, there is the general tendency to define stress as that physical and emotional experience which results from a requirement to change from the condition of the moment to any other condition."[21] Another popular definition, rooted in psychological and medical thought, conceptualizes stress as an external force which produces anxiety, tension, and illness.[18,22]

While it is true that stress is linked to illness, it is also associated with growth and achievement, and the nature of these relationships remains obscure.[23,24] Some individuals become ill when exposed to stress while others do not, and it is therefore necessary to concede that "exposure to stressors alone is almost never a sufficient explanation for the onset of illness... other factors that influence their impact require consideration."[25] The problem with most current definitions of stress is that they clearly conceptualize stress as an objective, mechanistic event which automatically produces a response.[4,26] This negates the action of the cognitive-appraisal system, which perceives and evaluates the environment.

Woolfolk and Richardson (1978) contend that events are neutral and do not produce stress reactions. They conclude that it is the perception or meaning of the events which makes them stressful. Thus, an event is stressful only to the extent that it is experienced or interpreted as being important or implying a consequence.[27]

To further expand on what stress really is, it is necessary to consider not only an individual's perception of the meaning of an event, but also his or her perception of the ability to adapt. Woolfolk and Richardson conclude that the events "not only must be both perceived and consequential to produce stress, they must also call into question the degree to which the individual believes he can respond with success and comfort."[28]

Lazarus and Launier (1978) expand on this premise, stating that "a potential harm is not a harm if the person can master it easily, and if it is appraised as such there is little or no threat." Thus, "the resources a person believes are available are arrayed psychologically against the dangers and harms being faced, and are a crucial cognitive factor in the generation of the psychological stress response."[6] The conditions necessary to produce stress include the perception of an event, the identification of that event as something which has meaning, and the conclusion that a response is required.

Life Events vs. Daily Hassles

The effect of stressful events on the subsequent development of illness has been the focus of stress research for the last fifteen years. In fact, modern research on the effects of stress has concentrated almost exclusively on the traumatic events in life, such as marriage, divorce and death.

In the mid-1960s Holmes and Rahe, using interviews and health histories of several thousand people, found a significant relationship between the major events in a person's life and that person's health.[26] The relationship appeared to be predictable and cumulative (i.e., the more life changes, the greater the incidence of illness) and applied both to positive events like marriage and to negative events like divorce. This discovery led to the development of the Social Readjustment Rating Scale, a list of major life events which was weighted as to the estimated impact of each stressor and used to gauge an individual's risk of suffering a stress-induced illness.

There are a number of reasons for the popularity of the life events approach to the study of stress.[4,16,20,28,29] First, the ease of administration of the measurement tool makes possible the study of a complex phenomenon in a wide variety of clinical settings. Second, the life events are situations which occur frequently in everyday life. This fact led to the concept of stress as a part of daily life and increased the understanding of stress among professionals as well as by the public. Third, by defining the concept of stress in terms of separate, time-limited events, it is easier to establish a cause and effect relationship. Eckenrode and Gore (1981) propose that "through prospective study of life events that can be accurately placed in time, researchers can be fairly confident that such events preceded the onset of an acute illness, a depressive episode, or a hospitalization."[28]

The life events view of the concept of stress has several drawbacks and has come under increasing criticism recently. This criticism centers on several underlying assumptions whose validity has been brought into question. The first assumption is that the identified stressors are the most relevant ones to all the people studied. The second assumption is that the individual is a passive recipient of the event. The third assumption is that in order to be stressful an event must be a time-limited situation, and associated with change.[5,17]

Lazarus and Launier (1978) focus on the vulnerability of these assumptions, stating that the situational or stimulus approach bears the crucial defect that there are always individual differences in the quality, intensity and duration of reaction to the same environmental event. In other words, we cannot consider the stress response as solely dependent on events external to the person, since humans are not passive responders to whatever happens. Rather, they perceive, evaluate, and therefore select and shape their environments to some extent, thus contributing to or preventing certain kinds of stress.[6] Life stress research has largely ignored the less dramatic but more frequent events, ranging from disagreements to accidents to unpleasant surprises, which have been termed daily hassles.

Recent research into the effects of daily hassles has yielded some interesting results.[4,5,11,12] First it was found that the stressful effects of daily hassles varied according to their frequency, intensity, and the response people had to them. Second, Lazarus (1981) discovered that daily hassles are more closely linked to and possibly have a greater effect on health than major life events. Therefore, daily hassles appear to be more sensitive predictors of mental and physical health than major life events. Clearly both daily hassles and major life events are crucial elements to address in any study which strives to explain as complex and multivariate a phenomenon as stress.

The Individual, The Family and The Community: Interaction for Adaptation

The daily hassles and major events of life that produce stress have been recognized as such an integral part of human existence that it has been argued that to eliminate stress means to eliminate all things which require adaptation, virtually eliminating life itself. The effects of stress lie in the individual's perception of events, not in the events themselves. Additionally, it has been determined that, depending on the predisposition and vulnerability of the individual, the reaction to stress may be primarily physical, primarily psychological, or mixed. The complex interplay between physical and psychological reactions, individual predisposition, and coping mechanisms is further complicated by social support and environmental factors.

One consistently perplexing problem in stress research is the individual difference in reactions to the same stressful conditions.[30-34] Why do some individuals perceive a particular event as an opportunity for growth and positive adaptation, while others see the same situation as a disaster? In an attempt to articulate the development of a "perception" perspective of stress and stress reactions, Chan (1977) proposed that attitudinal and personality constructs such as self-esteem and learned helplessness are the result of a long socialization process characterized by the interaction and transaction between the person and his or her environment.

Chan (1977) further contends that "perceived control whether understood in terms of self esteem, locus of control or helplessness becomes the primary determinant of how one responds to stimuli."[6,30] In other words, stress responses are connected with individual perceptions, which are in turn dependent on self evaluation of the coping skills and other available resources. Thus, how one responds to stress depends to a great degree on the supportiveness of the social and physical environment.[35,36] Further, the extent of meaningful relationships and ties to the community constitute the two most significant determinants of how an individual responds to stress. Because an individual's adaptation to a stressor is so extensively influenced by his or her social and environmental network, the relationship between the individual, the family and the community should comprise an important aspect of a comprehensive understanding of stress.

Stress and the Rural Community

Researchers in the field of stress have established that the community which comprises the environmental network within which an individual lives has a very important influence on that individual's perception of and adaptation to stress. Consequently, the health of an individual is intimately linked to the adaptive demands placed on him or her by the community. Yet research on the role of the community in mediating the effects of stress is largely unavailable. Further, very little descriptive research has been done on how stress is perceived in different types of communities, and information on specific stressors is sketchy at best.[37-43]

A large portion of American society is rural and 1980 census figures indicate that this portion is increasing. Rural areas tend to lag behind urban areas in changing cultural attitudes and norms.[44,45] With population and isolation placing constraints on the pace and diversity of social interaction, the effects of sudden growth can have a profoundly stressful effect upon the inhabitants and network of services in a rural community. Weisz (1979) concurs, stating that "when a community is forced to grow and change at a rate which exceeds its adaptive limits it is exposed to stresses which can threaten to overwhelm its capacity for orderly, constructive coping."[46]

The farm community exemplifies this theory. With the advent of mechanized farming and hybridized crops the typical family farm has entered an era of tremendous change. This change has resulted in the erosion of an American institution and has made the job of farming the most stressful occupation in America.[47-49]

Differences exist between urban and rural communities, not only in the pace with which they change but also in their coping patterns. Heyman (1982) outlines some basic similarities among personal, interpersonal and community orientation patterns in rural areas which are hinged on smaller social units and greater personal involvements. He states that "unlike urban areas, in which the relationships of people to one another involves small, distinct, fragmented units, in rural areas there is a more broad, continuous orientation from oneself to other parts of the community."[50] However, the rural community is far from being homogeneous, and the different relationships within the rural social system need to be understood within the context of the environmental network.

Although the pattern of rural living today is different from its urban counterpart, it is no less stressful.[47-49,51-52] In fact, Liberman and Frank content that rural life is more stressful, because the urban dweller has been habitualized to constant change and thus adjusted to it, while the rural resident has not been accustomed to change and therefore views it as more stressful.[50]

The social relevance of this data casts doubt on the assumption of the universality of the impact of specific stressors. Kuczynski (1981) believes that "since rural society experiences social changes more gradually than urban society, the actual stresses are different in nature."[44] Heyman (1982) confirms this belief and concludes that not only do rural communities differ from urban communities, but they also differ widely among themselves. Because of this, each specific rural area merits study in order to be understood for itself.[53]

Statistical Description of Rural Texas

With 14.2 million people, Texas is the third most populous state in the nation. The state is primarily rural, both from the standpoint of sparsely populated land area and in economic resources. Only 54 of Texas' 254 counties are included in the 25 federally designated metropolitan areas of Texas. Two hundred counties are designated as nonmetropolitan.[54]

Texas is second only to Alaska in size, with 262,840 square miles of land and 4,499 square miles of inland water. Within the state are extensions of the Chihuahuan desert of Mexico, the Caribbean tropics, the Great Plains of the U.S., and the Southern Piney Woods. The state has some distinctive geographic features of its own, such as the Blacklands area that wedges through the north central section of Texas and 367 miles of coast land. Texas has 93 mountains that are more than a mile high, 23,400,000 acres of forest land, and 70,000 miles of highways. Texas leads all states in production of crude oil, natural gas, and such agricultural products as cotton, all cattle, beef cattle, sheep and lambs, wool goats, and mohair.[54]

Texas' population is growing at a faster rate than the national average, advancing from the sixth largest state in 1960 to the third largest state in

1980. After a decade of population decrease, the state's population increased by 27% between 1970 and 1980. Twenty percent of the population of Texas is nonmetropolitan. Though this may not appear to be a large proportion, the rural population of Texas is larger than the total combined populations of Alaska, Delaware, Nevada, Vermont, and Wyoming.[1,55] The size of the state and the distribution of the population result in service delivery, economic, educational, transportation, and communication problems.

The nonmetropolitan population of Texas is 51% female and 49% male; 70.8% White, 9.3% Black, 19.3% Spanish Origin, and 0.7% Other Races. The metropolitan population is 51% female and 49% male; 81.2% White, 12.6% Black, 3.7% Spanish Origin, and 2.5% Other Races.[55]

There are 12.8 marriages and 6.5 divorces per 1,000 nonmetropolitan Texans and 14.3 marriages and 7.3 divorces per 1,000 metropolitan Texans. Both rural and urban Texans have similar average numbers of persons per family--3.4 for urban families and 3.3 for rural families.[56]

The median age of rural Texans, 33 years, tends to be older than that of metropolitan Texans, 28.8 years. This is consistent with the fact that 20.4% of the rural population is 60 or over and only 11.6% of the metropolitan population are in this age group. Coupled with these figures is the fact that 20.9% more householders are 65 years old or over in the rural areas than in metropolitan areas. Furthermore, children under 14 make up 23.9% of the rural population and 29% of the metropolitan population. Rural Texas appears to have a generally older population.[55]

Data from 1980 suggest an overall poverty rate of 14% for Texas. When this rate is broken down between metropolitan and nonmetropolitan areas, we find poverty rates of 18% for nonmetropolitan and 13% for metropolitan Texas.[55] The median family income for those residing in nonmetropolitan Texas is $17,744, while metropolitan residents had a median family income of $20,080 in 1980.[58] Per capita income is $6,445 for rural residents and $7,399 for urban residents.[58] Between 1970-1980, rural Texas saw a 161.4% increase in their family income and a 186.4% increase in their per capita income; urban Texans saw less of an increase, rising 112.7% in median family income and 138.1% in per capita income.[57]

Sixteen percent of nonmetropolitan residents over 25 years of age have less than a nine year education, as opposed to 10% of those in the same age group in metropolitan Texas, although the median education for rural Texans is 12 years and for urban Texans is 12.5 years.[55] Thirty-nine percent of Texas substandard housing is in the nonmetropolitan areas, with 32% of the owner-occupied housing units which were considered substandard and overcrowded (1.01 or more people per room) in 1980 located in nonmetropolitan counties.[55]

The unemployment rate for both metropolitan and nonmetropolitan areas was 5.6% in 1983.[58] However, the percent of women in the work force is higher in nonmetropolitan Texas than in metropolitan Texas--48.6% as compared to 39.1%.[59]

Ten percent of all crime occurs in rural Texas. The rural crime rate has increased faster than the urban crime rate. Between 1978 and 1983 the crime rate in nonmetropolitan areas increased by 38.6%; metropolitan areas experienced a 27.5% increase in crime during the same time period.[60-61]

Nonmetropolitan Texas has a higher death rate--10.9 per 1,000 population--than does metropolitan Texas--7.3 per 1,000 population.[56] This may be partially explained by the mortality rates for various diseases. In nonmetropolitan Texas, for example, 210 deaths per 100,000 population occur as a result of malignant neoplasms. The metropolitan rate is much lower, at 152.7 deaths per 100,000 population. Cerebrovascular diseases also account for more deaths in rural Texas--97 per 100,000 population as compared to 54.1 per 100,000 population in metropolitan areas. The death rates from tuberculosis is similar for nonmetropolitan and metropolitan areas, at 0.99 and 0.95 per 100,000 population respectively. However, heart disease accounts for 401.4 deaths per 100,000 in rural Texas and 249.8 per 100,000 in urban Texas. The only notable cause of death where the difference between metropolitan and nonmetropolitan areas is reversed is suicide; in metropolitan Texas, 14.9 deaths per 100,000 occur due to suicide and that rate drops to 12.8 in the rural areas.[56]

Beyond health care, there are significant figures with respect to mental health care. Of all direct admissions to state mental hospitals, 30.8% are from rural counties even though they comprise only 20% of the state's population. In addition, only 10 counties report no admissions and all are nonmetropolitan. Those admitted from rural counties tend to be released slightly sooner than metropolitan patients. It might also be noted that rural counties account for 25% of the admissions to state schools for the mentally retarded.[62]

The problems of rural Texans often match or surpass those of urban Texans, yet rural Texans have fewer resources and services available to deal with these problems.

Definition of Terms

The following definitions will be used for the purposes of this report:

Adult: Any individual 18 years of age or older.

Hassles: The irritating, frustrating, distressing demands that to some degree characterize everyday transactions with the environment.

Health/human service providers: Doctors of medicine, doctors of osteopathic medicine, registered nurses, nurse practitioners, licensed vocational nurses, physician assistants, health care facility administrators, emergency care attendants, emergency medical technicians, paramedics, dentists, pharmacists, social workers, psychologists, psychiatrists, and mental health workers.

Rural: A nonmetropolitan area. Nonmetropolitan is designated as all farms, open countryside, and places of less than 50,000 residents outside standard metropolitan statistical areas.

Rural resident: Any individual who lives in nonmetropolitan Texas.

Summary

It is abundantly clear that stress is a complex phenomenon which has been determined to have different characteristics according to the focus of the research. While stress has been linked to illness, it has also been associated with positive development. The exact nature of this interplay remains a topic for future investigation. In order for an event to be stressful it must fulfill certain criteria: it must be perceived, it must be meaningful, and it must tax the existing response system to the point of change.

Specific stressors which have made up the bulk of stress research can be divided into two basic types: life events and daily hassles. Both are important indicators of the potential of an individual's stress level, but daily hassles have been documented to be the more sensitive predictor of stress level and mental and physical health.

An individual's response to life events or daily hassles is greatly influenced by the support received from the social and environmental support network. Thus, individual stressors must be viewed within the context of the family and the environment.

Because the environmental network is an important influence on stress potential, the aspect of community stress must be considered. Rural and urban communities differ in their rate of and ability to change. These communities may also differ in the nature of their stress and their reactions to it. Yet research in the area of rural stress has barely scratched the surface and is characterized by inadequately encompassing theories and studies with limited focus. In order for the specific nature of stress in rural areas to be understood, each area merits study. The identification of rural stressors and an indication of the relative level of stress remain important unresolved problems. Research on stress in rural Texas can provide important insights into the fundamental nature of rural problems and provide a basis on which to focus effective, economical coping strategies.

CHAPTER 3: METHODOLOGY

This study of stressors in the rural environment utilized a descriptive design and a modified random sampling technique. Two survey questionnaires were developed using a combination of forced-choice and open-ended questions to elicit information from two sample populations: rural Texas residents and rural Texas health and human service providers. An interview form was designed to validate and illuminate the survey findings, and interviews were conducted at random with 125 rural residents from 25 typical rural communities.

This chapter contains a statement of purpose, followed by sections detailing the procedures used to select the sample population, to develop the survey and interview designs, and to administer the tools. Selection of the sample population will be discussed first, followed by instrument design and data collection.

Statement of Purpose

This study was designed to use survey instruments and an interview tool to identify and describe stress in rural Texas. The major goal of this research was to obtain an initial yet comprehensive description of the stressors in the environment of rural Texans.

Population

Typical Rural County

In order to facilitate the selection of a representative population of rural health and human service providers and rural residents, typical rural counties were identified and the survey sample population was selected from those counties. To accomplish this, 1980 census data were retrieved and criteria for the determination of a county profile were developed. Rural and census data experts were consulted on the development of the county profile criteria. These criteria were designed to create a composite of the average rural Texas county based on statistical information such as population, ethnic composition, poverty level, and per capita income. In all, sixteen variables were selected to develop the basis of the composite for the typical county (Appendix A).

A data file was created using non-SMSA (Standard Metropolitan Statistical Area) and county data from the 1980 census. The database was not available in a format which made retrieval of the non-SMSA variables easy, and significant manipulation was required to build the file. From this data file a typical county profile was developed and the sixteen variables were compiled for each of the 200 non-SMSA counties in Texas. Next, a computer program to rank each of the counties on how closely they matched the theoretical typical county was designed.

Methodologically, it would have been valid to select one Texas county from which to obtain the sample population. However, past experience had indicated that Texas could not be considered homogeneous, having several culturally and geographically distinct regions, and a decision was made to divide the state into five separate regions (Appendix B). Based on this decision, five different county profiles were developed and all of the rural counties within each of the regions were ranked against the specific county profile for that region. Data analysis led to the identification of the following five rural counties: Atascosa, Cass, Freestone, Scurry, and Upton. Each of these counties represents the closest statistical match with the county profile for that region.

Typical/Representative Texas Rural Communities

To provide further insight into the problems and strengths of the average rural community, typical/representative communities were identified. Because the concept of "typical" is one which can be defined more completely than a statistical evaluation will allow, the Texas Rural Health Field Services Program (TRHFSP) staff felt that it was important to further explore the concept, define its attributes, and select examples of typical Texas communities.

In order to accomplish this, two activities were undertaken. First, a modified content analysis of the concept "typical" was done. Second, 54 experts on rural Texas were selected from the areas of business, education, agriculture, health, human services, and religion. These experts were contacted by mail and asked to provide the names of two typical rural Texas communities and their criteria for selection. The results were compiled by region and plotted on a map.

Twenty-five communities, representing the identified attributes of the concept "typical," were selected for site visits. Selections were made on the basis of geographic distribution, demographic characteristics, criteria used by the experts, and the number of times the community was nominated.

Sample

To identify a representative population of rural residents, contacts were made with agencies and organizations such as the Texas Electrical Cooperatives, Texas Department of Public Safety, Texas Farm Bureau, Texas Agricultural Extension Service, and Southwestern Bell Telephone Company. From the information received, it became clear that the most complete and up-to-date list of rural residents could be obtained through the use of telephone company data. According to AT&T and other Texas telephone company statistics, over 90% of rural Texans have telephones.

The sample population of rural residents was selected by the following procedure. First, a population figure was obtained from the 1980 census data for each of the counties. Next, 2% of the population for each county was calculated. The figures are as follows:

County	Total Population	Sample Population
Atascosa	25,055	501
Cass	29,430	589
Freestone	14,830	297
Scurry	18,192	364
Upton*	4,619	184

This created a total sample population of 2,027. Survey Sampling, Inc. of Connecticut was contacted to pull the names and addresses of a random sample of 2% of the population in the selected counties from their telephone company information database. Their database consists of a proportional sample of the telephone companies' data for counties throughout the United States.

The sample population of health and human service providers was obtained from the TRHFSP database and by contacting agencies, licensing boards, and professional organizations for each of the provider groups. The provider groups included in the sample population were physicians, registered nurses, licensed vocational nurses, physician assistants, health care facility administrators, emergency care attendants, emergency medical technicians, paramedics, dentists, pharmacists, social workers, and psychologists. Obtaining comprehensive lists of some professions was not possible due to the unavailability of complete information from either the licensing boards or professional organizations. All names obtained within the provider groups for each of the five typical counties were used to create a total sample population of 1,165 health and human service providers.

---

* Due to the small size of the sample population in Upton county, the decision was made to increase the percentage of residents surveyed for this county to 4%.

Survey Design

From the stress literature, a list of stressors supported by research findings was identified. Rural and stress experts were also consulted on their ideas about rural stressors. These identified stressors provided the conceptual framework for the development of the survey questions as well as the categories for the content analysis of the open-ended questions. Two questionnaires were developed, one for rural residents and one for health and human service providers. The first drafts of the health and human service provider questionnaire and the rural resident questionnaire were completed and eight people with expertise in one or more areas including survey design, stress management, health care, and rural health were selected to critique the survey instruments.

In order to pilot test the survey design, each survey instrument was administered to fifteen people. The rural community of Taylor, Texas was selected as the pilot test site. The Project Coordinator administered all of the surveys in person in order to obtain information on the time it took to complete the questionnaires, the understandability of the questions and any other comments the respondents might have. The final survey questionnaires (Appendix C) reflect a composite of their comments and suggestions and the critiques of the experts who evaluated the design.

Interview Design

The structured interview form (Appendix D) was developed to augment the survey data. The interview format was designed with the assistance of rural experts and structured interview specialists to facilitate valid and comprehensive data collection. The first draft of the structured interview form was completed and pilot tested with rural residents and health and human service providers during a site visit to Yoakum, Texas.

Data Collection

Surveys

Survey questionnaires were sent to 1,965* rural residents and to 1,165 rural health and human service providers. The cover letters described the purpose of the survey and requested that the completed questionnaires be returned. Few questionnaires were received by the deadline and reminder postcards were sent to the rural residents and health and human service providers. A total of 168 (8.7%) rural residents and 153 (13.1%) health and human service providers completed and returned surveys in usable form (Tables 1 and 2).

Table 1: Resident Respondents to Survey by Region

Region	Number in Sample Population	Number of Respondents	Percent of Total Responses	Percent of Sample Population
1	364	31	18.4	8.5
2	184	11	6.5	6.0
3	501	46	27.4	9.2
4	297	26	15.5	8.8
5	589	54	32.1	9.2
Total	1,935	168	100.0	8.7

---

* This figure represents the adjusted sample population due to attrition.

Table 2: Health and Human Services Respondents to Survey by Region

Region	Number in Sample Population	Number of Respondents	Percent of Total Responses	Percent of Sample Population
1	320	30	19.6	9.1
2	53	8	5.2	15.1
3	237	36	23.5	15.2
4	235	34	22.2	14.5
5	320	45	29.4	14.1
Total	1,165	153	100.0	13.1

Interviews

Members of the project staff travelled to 25 typical communities and the five typical counties in rural Texas. In each of the 25 typical communities structured interviews, taking an average of 30 minutes to one hour, were conducted with five randomly selected rural residents and health and human service providers. In addition, the TRHFSP staff toured each community, recording their observations and compiling a photographic record.

Secondary Data

Secondary data concerning conditions which have some potential impact on the stress level of an individual, family or community were identified. Data from various sources were collected on each of the 200 nonmetropolitan counties and compiled on a regional basis for different facets of health and human services, manpower, economics, environment, crime, and demographics in rural Texas. These data were used in the triangulation process to substantiate and further illuminate the survey and interview data.

Statistical Analysis

Analysis of the survey and interview data consisted of simple numerical counts to obtain frequencies and percentages. Relevant findings were subjected to analysis of variance and multidimensional scaling techniques. Categories were developed for content analysis on all open-ended survey and interview questions and simple numerical counts were done on a category-by-category basis. The following chapter reports the results of these analyses.

CHAPTER 4: FINDINGS AND DISCUSSION

In this chapter, data analysis of the surveys will be discussed on a question by question basis. Statewide and regional demographic characteristics of the rural resident respondents will be discussed first, followed by characteristics of resident respondents' and health/human service provider respondents' communities. Significant findings from the rest of the survey data resulting from analysis utilizing frequencies, analysis of variance, and multidimensional analysis will then be reported, followed by interview data. During the discussion of each facet of data, relevant secondary data will be reported.

Analysis of Survey Data

Demographic Characteristics of Rural Resident Respondents

In this section, key demographic and social characteristics of the rural Texans who responded to the residents survey are described and compared w meanith the characteristics of rural Texas as a whole. Survey variables are reported first, followed by secondary data from the U.S. Census of Population for 1980. Descriptions and comparisons are based on the information obtained from the survey and the similarities and differences between the responding population and the statistical profile of rural Texas.

The rural adult residents surveyed were asked to indicate their age. The ages were grouped as follows: 18-24 years, 25-29 years, 30-39 years, 40-49 years, 50-59 years, and 60 years or over. The resident respondents' median age fell in the category 50-59 years. This is in the same range as the median age of adult rural Texans. It should be noted that the percentage per age category of resident respondents consistently rose from a low of 1.8% for the 18-24 age category to a high of 33.3% for the 60 years or over age category (Table 3). Although the percentage per age category of nonmetropolitan Texans also rose steadily, the numbers were more equally distributed across categories and there was a noticeable drop in the number of persons in the 50-59 age category. The 60 years or over age group in nonmetropolitan Texas comprised 20.4% of the population,[55] as compared to 33.3% for the rural resident respondents. This percentage appears in contrast to the 11.6% of the population in the 60 years or over age category of metropolitan Texas.[55]

Table 3: Age of Rural Resident Respondents

Age category	Number of responses	Percent
18-24 years	3	1.8
25-29 years	17	10.3
30-39 years	29	17.6
40-49 years	28	17.0
50-59 years	33	20.0
60 years or over	55	33.3
Total	165	100.0

The rural residents were asked to indicate their sex (Table 4). Of the respondents, 37.7% were female. This percentage is consistent with the population of females 18 years old and older in the five counties selected as typical: Scurry (region 1), 36.2%; Upton (region 2), 33.0%; Atascosa (region 3), 33.1%; Freestone (region 4), 38.9%; and Cass (region 5), 37.4%.[55] The female population of these counties is representative of the population that is female in nonmetropolitan Texas.[55] The female population of metropolitan Texas is 34.9%.[55]

Table 4: Sex of Rural Resident Respondents

Sex	Number of responses	Percent
Male	101	62.4
Female	61	37.7
Total	162	100.0

The rural residents were asked to specify which of the following races or ethnic groups they belonged to: Hispanic, Black, Caucasian, Asian American, American Indian, or Other. In responding to this question, the adult rural residents indicated that Caucasians made up 82.5% of the total respondent population, with Hispanics comprising 9.4%, Blacks 6.9%, and Other 1.3% (Table 5). The percent of adult Caucasians is consistent with the mean, 84.3%, of the five counties chosen as typical of rural Texas.[55] The mean of the adult black population of the five typical counties is 9.1%.[55] This is higher than the percentage of blacks among the resident respondents. The percent of adult blacks in the nonmetropolitan population is 8.7%.[55] There is an inconsistency between the mean percentage of individuals of Spanish origin in the five typical counties (16.2%)[55] and the percentage of Hispanic respondents to the survey (9.4%). The 9.4% is slightly more than half the 15.7% that adult individuals of Spanish origin represent in nonmetropolitan Texas.[55] This inconsistency may originate from the use by the Census of the category "Spanish Origin," which includes individuals of all races with a Spanish surname, while the survey category "Hispanic" would not include people of other races.

Table 5: Race or Ethnic Group of Rural Resident Respondents

Race or ethnic group	Number of responses	Percent
Hispanic	15	9.4
Black	11	6.9
Caucasian	132	82.5
Other	2	1.3
Total	160	100.1*

* percentages rounded

The rural resident respondents were questioned as to their marital status. The possible responses were: Married, Never Married, Divorced, Separated, Remarried, Living Together, and Widowed. Of the respondents, 79.9%* indicated they were presently married (Table 6). This is significantly higher than the percentage indicated for the five counties chosen as typical of rural Texas. The percentage of married persons in the population in those counties ranged from a low of 47.3% in Atascosa county (region 3) to a high of 51.4% in Scurry county (region 1).[55] Of the respondent population, 4.3% had never married. The typical rural counties had a range of single persons from a high of 15.8% in Atascosa county (region 3) to a low of 11.8% in Freestone county (region 4).[55] The respondents who indicated they were separated represented only 0.6% of the rural resident respondents. The percentage of people in the five typical rural counties who indicated marital separation varied from 0.5% in Upton county to 1.2% in Cass.[55] Of the rural respondents, 11.6% indicated they were widowed. There is a variation among the five counties in terms of the percent of persons who are widowed, from a high of 10.6% in Freestone county (region 4) to a low of 5.1% in Upton county (region 2).[55] Somewhat more consistency exists in the percentage of individuals who indicated that they were divorced. Divorced individuals made up 3.7% of the rural respondents, and the five typical counties had a divorced population range of 4.1% in Cass county (region 5) to 2.5% in Atascosa county (region 3).[55]

---

* This number represents the total of the categories Married and Remarried.

Table 6: Marital Status of Rural Resident Respondents

Marital status	Number of responses	Percent
Married	125	76.2
Never married	7	4.3
Divorced	6	3.7
Separated	1	0.6
Remarried	6	3.7
Widowed	19	11.6
Total	164	100.1*

* percentages rounded

The rural residents surveyed were asked to indicate how many children they have. The categories were: None, 1, 2-3, and 4 or more (Table 7). Of the rural resident respondent population, 56.8% had 2-3 children. This is consistent with the mean numbers of children per family in the five typical counties from which the sample was drawn and in nonmetropolitan Texas.

Table 7: Number of Children in the Families of Rural Resident Respondents

Number of children	Number of responses	Percent
None	22	13.6
1	24	14.8
2-3	92	56.8
4 or more	24	14.8
Total	162	100.0

When the rural residents were asked to describe their living situation, 79.9 percent said they were living with their spouse; of that 79.9%, 49.6%

were living with their spouse and children (Table 8). Single parents made up 4.2%* of the respondents, while 12.2% lived alone.

Table 8: Living Situation of Rural Resident Respondents

Living situation	Number of responses	Percent
Married, living with spouse	66	40.2
Married, living with spouse and children	65	39.6
Single parent, male	3	1.8
Single parent, female	4	2.4
Live alone	20	12.2
Other	6	3.7
Total	164	99.9*

* percentages rounded

To gain further insight into the lives of rural Texans, rural residents were asked to identify other people living in their homes. They were provided with four categories: Parent or Parents, Other Relative, Friends, and Other Children. Sixty-four percent of the respondents indicated that relatives lived in their homes (Table 9). The resident respondents indicated that in 36.4% of the cases, non-relatives shared their homes.

Table 9: Others Living in Rural Resident Respondents' Homes

Others in home	Number of responses	Percent
Parent or parents	9	40.9
Other relative	5	22.7
Friends	1	4.6
Other children (not their own)	7	31.8
Total	22	100.0

---

* This figure represents the total of the categories Single Parent, Male and Single Parent, Female.

The rural residents were asked to indicate the highest level of education completed. The range was from less than seventh grade through completion of a graduate degree (Table 10). The median level of education for adults in rural Texas is 12.0 years.[55] The rural residents surveyed indicated a median education of partial college or special training. Three of the five typical counties--Scurry with 12.2 years, Upton with 12.1 years, and Cass with 12.1 years--had median education levels in the same range as those of the respondents to the rural residents survey.[55] The median level of education in Atascosa (11.2 years) and Freestone (11.9 years) counties is slightly less than the median in rural Texas.[55] The respondents to the rural residents survey have a slightly higher level of education than that of the average rural Texan.

Table 10: Highest Level of Education Completed by Rural Resident Respondents

Education level	Number of responses	Percent
Less than 7th grade	13	8.1
Junior high (9th grade)	12	7.5
Partial high school (10th or 11th grade)	10	6.3
High school graduate	34	21.3
Partial college or special training (at least one year)	48	30.0
College or university education	25	15.6
Graduate degree	18	11.3
Total	160	100.1*

* percentages rounded

Rural residents were asked about the number of hours per week they worked for income (Table 11). Only 2.5% stated they were unemployed, but still considered themselves to be in the labor force, and another 11.4% stated they were unemployed. In the five typical counties, the unemployment statistics ranged from a low of 3.1% in Upton county to a high of 8.3% in Cass county.[58] The percentage of unemployed respondents may be higher than expected because the Unemployed category could include housewives and others not working for income by choice and who are not usually considered part of the labor force, but who may have checked this category because of the wording of the survey question. Of greater interest is the large percentage (38.0%) of respondents who worked greater than 40 hours per week. This figure may incorporate many rural Texans who are being forced to work two jobs due to the economic pressures brought about by factors such as drought and low wage scale. This finding is consistent with the fact that rural resident respondents ranked work hours as the second most influential stressor in their lives.

Table 11: Hours Per Week Worked for Income by Rural Resident Respondents

Hours worked per week	Number of responses	Percent
Unemployed	18	11.4
Unemployed and seeking employment	4	2.5
20 or less	4	2.5
21-40	35	22.2
41-50	27	17.1
51-60	19	12.0
61-70	9	5.7
71-80	3	1.9
Over 80	2	1.3
Retired	37	23.4
Total	158	100.0

Summary of Demographic Characteristics of Rural Resident Respondents

The typical rural resident respondent was 50 years of age or older, Caucasian, and male. Generally the respondents were married and had two or three children. The respondents, in almost a four to one margin, lived with their spouses. Most of them had no people outside their immediate family and relatives living in their homes. The majority of resident respondents had received some education or training beyond high school and were currently working full-time. Though the respondents tended to be somewhat older and better educated than the average rural Texan and a greater percentage were married and male, for the most part the respondents may be considered a representative sample of the rural residents of the typical counties and thus a representative sample of rural Texans.

Demographic Characteristics of Health/Human Service Provider Respondents

Health/human service providers were asked to identify their professions from a list of nine professional categories (Table 12). The category RN, LVN, PA accounted for the largest number of respondents (N=99, 66.9%). In order of frequency, the other specific professions represented were: ECA, EMT, Paramedic (N=19, 12.8%); Other (N=10, 6.8%); Physician (N=8, 5.4%); Social Worker (N=6, 4.1%); Pharmacist (N=2, 1.4%); Dentist (N=2, 1.4%); Psychologist or Counselor (N=1, 0.7%); and Administrator (N=1, 0.7%). These categories reflect fairly well the present manpower distribution in nonmetropolitan Texas.

Table 12: Profession of Health and Human Service Provider Respondents

Profession	Number of responses	Percent
Physician	8	5.4
RN, LVN, PA	99	66.9
ECA, EMT, paramedic	19	12.8
Dentist	2	1.4
Social worker	6	4.1
Psychologist or counselor	1	0.7
Administrator	1	0.7
Pharmacist	2	1.4
Other	10	6.8
Total	148	100.2*

* percentages rounded

Demographic Characteristics of the Survey Respondents' Communities

When asked about length of time each respondent had lived in the community, 52.8% (N=85) of the rural residents indicated that had lived there 21 years or longer, and only 1 person (0.6%) had lived there less than one year (Table 13). Approximately 57% of the health and human service providers indicated that they had worked in their communities for ten years or less (Table 14). Notably, 32% had worked in the community for five years or less. These figures do not take into account health and human service providers who lived in their community prior to entering their profession. The median amount of time worked in the communities does, however, represent a level of experience which should enable them to make accurate judgements about their clients.

Table 13: Length of Time Rural Resident Respondents Have Lived in their Community

Time	Number of responses	Percent
6 months or less	0	0.0
7-11 months	1	0.6
1-2 years	5	3.1
3-5 years	16	9.9
6-10 years	25	15.5
11-20 years	29	18.0
21 years or longer	85	52.8
Total	161	99.9*

* percentages rounded

Table 14: Health/Human Service Provider Respondents' Length of Work Time in Community

Length of time	Number of responses	Percent
6 months or less	1	0.7
7-11 months	5	3.3
1-2 years	13	8.7
3-5 years	29	19.3
6-10 years	37	24.7
11-20 years	35	23.3
21 years or longer	30	20.0
Total	150	100.0

Each survey respondent was asked to indicate whether his or her community was small, moderate, or large in size. Rural residents and health and human service providers had relatively similar perceptions as to the size of their community (Tables 15 and 16). Sixty-two percent of the residents and 58.8% of the health and human service providers reported living in a small community.

This similarity existed to a somewhat lesser degree with those living in a moderate community--rural residents 31.9% and health and human service providers 39.2%. The greatest difference between the two respondent populations was among those reporting that they lived in a large community--rural residents 6.1% and health and human service providers only 2.0%.

Table 15: Size of Rural Resident Respondents' Community

Size	Number of responses	Percent
Small community	101	62.0
Moderate community	52	31.9
Large community	10	6.1
Total	163	100.0

Table 16: Size of Health and Human Service Provider Respondents' Community

Size of community	Number of responses	Percent
Small	87	58.8
Moderate	58	39.2
Large	3	2.0
Total	148	100.0

Perceptions of both the resident and provider respondents questioned about the change of the size of their communities were very consistent. Sixty point one percent of the residents felt their communities had increased in size over the past five years, and 59.5% of the health and human service providers felt the same (Tables 17 and 18). In contrast, only 3.1% of resident respondents and 6.1% of health/human service providers indicated a decrease in the size of their communities. A significant number of resident respondents and provider respondents felt their communities had not changed much--34.5% and 36.8% respectively.

Table 17: Rural Resident Respondents' Perception of the Change in their Community's Size Over the Past Five Years

Change	Number of responses	Percent
Yes, it has increased	98	60.1
Yes, it has decreased	5	3.1
No, it has not changed much	60	36.8
Total	163	100.0

Table 18: Change in Size of Health and Human Service Provider Respondents' Community in Past Five Years

Response	Number of responses	Percent
Yes, it has increased	88	59.5
Yes, it has decreased	9	6.1
No, it has not changed much	51	34.5
Total	148	100.1*

* percentages rounded

Of those respondents who felt their community had changed, 7.5% of the residents and 6.9% of the health and human service providers reported the change to be "very fast" (Tables 19 and 20). Twice as many believed the change to be "fast"--15.9% and 17.8% respectively. A majority of both groups, 60.8% of the residents and 57.4% of the providers, saw the change as "moderate," while 15.9% of the rural residents reported their community change as "slow" to "very slow," and 17.9% of the health/human service providers reported the same. Again, the figures between the two survey populations are relatively consistent.

Table 19: Rural Resident Respondents' Perception of the Pace at Which the Size of their Community has Changed

Pace	Number of responses	Percent
Very fast	8	7.5
Fast	17	15.9
Moderate	65	60.8
Slow	12	11.2
Very slow	5	4.7
Total	107	100.1*

* percentages rounded

Table 20: Health and Human Service Provider Respondents' Perception of the Pace of Change in the Size of their Community

Pace	Number of responses	Percent
Very fast	7	6.9
Fast	18	17.8
Moderate	58	57.4
Slow	13	12.9
Very slow	5	5.0
Total	101	100.0

Responses to the question identifying the reasons for change in community size are similar for both groups. Sixty-two point four percent of the rural residents felt that the change was due to "workers and their families moving in," and 66.3% of the providers reported the same, while only 4.3% of the residents and 5.8% of the providers reported that change was due to "Retirees moving in" (Tables 21 and 22). The greatest difference between the two groups occurred in the response category "Hometown kids have left." Only 1.0% of the health/human service providers felt this was a cause of the change in size of their community, while 6.8% of the rural resident respondents considered it a significant factor. Comparable figures again resulted when the respondents felt "Other" reasons existed for the change. The providers indicated that there were "Other" reasons for change in the size of their community 24% of the time and 21.4% of the residents indicated the same. The "Other" reasons included population flux due to oil boom/bust, families dying out, retirees leaving, and hometown kids moving back.

Table 21: Rural Resident Respondents' Perception of Why the Size of Their Community has Changed

Reason for change	Number of responses	Percent
Workers and their families have moved in	73	62.4
Retirees have moved in	5	4.3
Hometown kids have left	8	6.8
Local families have left	6	5.1
Other	25	21.4
Total	117	100.0

Table 22: Health and Human Service Provider Respondents' Perception of Why the Size of their Community has Changed

Reason for change	Number of responses	Percent
Workers and their families have moved in	69	66.3
Retirees have moved in	6	5.8
Hometown kids have left	1	1.0
Local families have left	3	2.9
Other	25	24.0
Total	104	100.0

Rural residents and health and human service providers were asked whether or not the changes in their community had been stressful. Only 10.6% of the residents felt that the changes in their community had been stressful to them and their families (Table 23). The health and human service provider respondents did not agree; 30.5% believed the changes to be stressful (Table 24). Only 7.3% of the resident respondents felt they didn't know whether the changes were stressful; remarkably, 33.9% of the provider respondents indicated the same.

Table 23: Rural Resident Respondents Who Perceived the Changes in their Community as Stressful

Response	Number of responses	Percent
Yes	13	10.6
No	101	82.1
I don't know	9	7.3
Total	123	100.0

Table 24: Health and Human Service Provider Respondents' Perception of Stress Felt by Clients Due to Changes in the Community

Response	Number of responses	Percent
Yes	36	30.5
No	42	35.6
I don't know	40	33.9
Total	118	100.0

Rural residents and providers were asked to indicate whether their communities were better, the same, or worse economically as a result of the change in size (Tables 25 and 26). Slightly more of the rural residents responded that their community was in better economic condition over the past five years (38.8%) than did the health and human service providers (34.7%). An equal number of providers felt the economics of the community to be worse; however, that figure dropped to 29.4% for the residents. A comparable number of residents and providers, 31.8% and 30.6% respectively, felt the economic condition of their community had not changed.

Table 25: Rural Resident Respondents' Perception of the Change in Economic Condition of their Community in the Past Five Years

Economic change	Number of responses	Percent
Yes, my community is in better economic condition	62	38.8
Yes, my community is in worse economic condition	47	29.4
No, the economic condition of my community has not changed	51	31.8
Total	160	100.0

Table 26: Health and Human Service Provider Respondents' Perception of Economic Change in their Community during the Past Five Years

Economic change	Number of responses	Percent
Yes, my community is in better economic condition	51	34.7
Yes, my community is in worse economic condition	51	34.7
No, the economic condition of my community has not changed	45	30.6
Total	147	100.0

Of the respondents who felt that economic change had occurred, 26.7% of the providers and 28.1% of the residents felt the change to be "fast" to "very fast" (Tables 27 and 28). In both populations the majority, 56.4% of the health and human service providers and 52.3% of the rural residents, felt the changes were moderate. Sixteen point eight percent of the providers and 19.7% of the residents indicated the change was "slow" to "very slow."

Table 27: Rural Resident Respondents' Perception of the Pace of the Economic Change in their Community

Pace of change	Number of responses	Percent
Very fast	10	9.4
Fast	20	18.7
Moderate	56	52.3
Slow	19	17.8
Very slow	2	1.9
Total	107	100.1*

* percentages rounded

Table 28: Health and Human Service Provider Respondents' Perception of the Pace of the Economic Change in their Community

Pace of change	Number of responses	Percent
Very fast	8	7.9
Fast	19	18.8
Moderate	57	56.4
Slow	11	10.9
Very slow	6	5.9
Total	101	99.9*

* percentages rounded

When questioned about living conditions, the rural resident respondents' and the health and human service provider respondents' perception of the living conditions for the majority of the people in their community differed, with the residents viewing them as better than did the health providers (Tables 29 and 30). Forty-six point six percent of the residents felt that living conditions were good, while the majority of providers (57.1%) felt that living conditions were only adequate. Three point seven percent of the rural resident respondents felt that living conditions were excellent, with only 1.4% of the health and human service providers reporting excellent conditions. There was a greater degree of agreement among residents for the condition "Poor," with 5% of residents and 7.5% of providers reporting this as the prevalent condition in their communities. Interestingly, neither provider nor resident respondents felt their communities were experiencing terrible living conditions.

Table 29: Rural Resident Respondents' Perception of the Living Conditions for a Majority of the People in their Community

Living condition	Number of responses	Percent
Excellent	6	3.7
Good	75	46.6
Adequate	72	44.7
Poor	8	5.0
Terrible	0	0.0
Total	161	100.0

Table 30: Health and Human Service Provider Respondents' Perception of the Living Conditions for a Majority of the People in their Community

Living condition	Number of responses	Percent
Excellent	2	1.4
Good	50	34.0
Adequate	84	57.1
Poor	11	7.5
Terrible	0	0.0
Total	147	100.0

When asked about the level of unemployment in their community, the responses of the two groups were similar, with the providers reporting a slightly higher overall level of unemployment (Tables 31 and 32). Eleven point eight percent of the rural residents responded that unemployment was high, with 12.7% of the health and human service providers giving the same response. Forty-four percent of the providers indicated that unemployment was moderate as compared to a response rate of 38.5% for residents. More residents felt unemployment was low (44.1%) than either high or moderate, and 41.3% of the providers indicated the same response. Five point six percent of the residents perceived their community as having no unemployment, while only 2.0% of the providers concurred.

Table 31: Rural Resident Respondents' Perception of the Level of Unemployment in their Community

Level of unemployment	Number of responses	Percent
High	19	11.8
Moderate	62	38.5
Low	71	44.1
None (there is no unemployment)	9	5.6
Total	161	100.0

Table 32: Health and Human Service Provider Respondents' Perception of the Level of Unemployment in their Community

Level of unemployment	Number of responses	Percent
High	19	12.7
Moderate	66	44.0
Low	62	41.3
None (there is no unemployment)	3	2.0
Total	150	100.0

A majority of the rural residents (50.3%), when asked about poverty in their community, felt that the level of poverty was low (Table 33). Health and human service providers responded most frequently that the poverty level was low (48.6%) (Table 34). There was a significant difference in the "moderate" response. The rural residents indicated in 36.7% of the responses that poverty was moderate, whereas 42.6% of the health and human service providers stated the same. The poverty rate was considered high by 6.8% of the health and human service provider respondents and 5.6% of the rural resident respondents. There was a notable difference among those indicating that there was no poverty in their community--7.5% of the residents and 2.0% of the providers. These differences may be accounted for by the fact that the providers may encounter poverty more frequently in the context of their jobs.

Table 33: Rural Resident Respondents' Perception of the Level of Poverty in their Community

Level of poverty	Number of responses	Percent
High	9	5.6
Moderate	59	36.7
Low	81	50.3
None (there is no poverty)	12	7.5
Total	161	100.1*

* percentages rounded

Table 34: Health and Human Service Provider Respondents' Perception of the Level of Poverty in their Community

Level of poverty	Number of responses	Percent
High	10	6.8
Moderate	63	42.6
Low	72	48.6
None (there is no poverty)	3	2.0
Total	148	100.0

The quality of various community services was rated by both residents and health service providers. The mean ratings of these services by rural residents and health and human service providers (collapsed across regions) are presented in Tables 35 and 36 respectively. The correlation between the providers' and residents' mean ratings for overall community services may be found in Table 37.

Table 35: Overall Rankings of Rural Resident Respondents' Mean Ratings of Service Quality

Variable	Mean	Standard deviation	Number of responses
Churches	3.834	1.038	163
Schools	3.512	1.087	160
Fire	3.185	1.104	151
Library	3.148	1.211	128
Police	2.966	1.198	148
Health services	2.885	1.079	148
Social services	2.754	1.065	134
Adult education	2.717	1.187	99
Public recreation	2.385	1.165	135
Public transportation*	1.898	.984	49

---

* 69.8% of the rural resident respondents indicated that public transportation was not available in their community.

Table 36: Overall Rankings of Health and Human Service Provider Respondents' Mean Ratings of Service Quality

Variable	Mean	Standard deviation	Number of responses
Churches	3.808	.881	146
Schools	3.384	.984	146
Fire	3.096	1.053	146
Library	3.049	1.031	123
Health services	2.952	1.046	146
Police	2.925	1.073	147
Social services	2.460	1.000	137
Adult education	2.460	1.180	113
Public recreation	2.237	1.059	135
Public transportation*	1.681	1.086	47

Table 37: Correlation Between Rural Resident Respondents' and Health and Human Service Provider Respondents' Mean Ratings of Quality of Services in Community

		Residents' Mean Rating
Providers' Mean Rating	r	.985*
	p	(.0001)

There is, overall, a high degree of agreement between residents and providers on the quality of services in their communities (r=.985, p=.0001). Examination of the mean ratings shows that the top and bottom four services are ranked identically. The quality of each of these four services (churches, schools, fire, and library) was rated between good and very good by both groups (3=good, 4=very good). Furthermore, the quality of each of the bottom four services (social services, adult education, public recreation, and public transportation) was rated slightly less than good to slightly less than fair (2=fair, 1=poor). The actual mean ratings by both groups on these four services were approximately the same. The only discrepancy between the rankings of the health and human service providers' and the rural residents' mean ratings occurred with regard to police and health services. Providers felt that the quality of health services was slightly higher than that of the police department; the residents felt the reverse was true.

---

* 68.3% of the health and human service provider respondents indicated that public transportation was not available in their community.

The regional intercorrelations between the rank ordering of the providers' mean quality ratings of services in their communities are presented in Table 38. All of these correlations are significant and their magnitude indicates a large degree of agreement between providers from different regions. It appears that regardless of the providers' region, the quality of services provided in the community remains relatively constant. In general, the quality of the churches and schools was relatively higher than that of the other services listed. In addition, public recreation and public transportation were typically given lower quality ratings than most of the other services. (Please note that 68.5% of the providers and 69.8% of the residents reported that their communities did not have public transportation--this mean rating is based on those communities which do offer this service.) Police and social services were rated such that they typically fell between the ranks of 5 and 7.5. The rank of health services was between 6 and 8 for regions 1 (north Texas), 2 (west Texas), and 3 (south Texas); however, in regions 4 (central Texas) and 5 (east Texas) its rank increased to number 2 and 4, respectively.

Table 38: Regional Intercorrelations of Health and Human Service Provider Respondents'Mean Ratings of Quality of Services in Community

Providers' Region		Providers' Region				
		Region 1	Region 2	Region 3	Region 4	Region 5
Region 1 North Texas	r	1.000	.894*	.903*	.756*	.648*
	p		(.0005)	(.0003)	(.0114)	(.0425)
Region 2 West Texas	r		1.000	.888*	.700*	.729*
	p			(.0006)	(.0241)	(.0166)
Region 3 South Texas	r			1.000	.848*	.867*
	p				(.002)	(.0012)
Region 4 Central Texas	r				1.000	.781*
	p					(.0077)
Region 5 East Texas	r					1.000
	p					

* significant r=correlation p=probability

Given the degree of agreement between provider respondents and resident respondents across regions (r=.985), it is not surprising that all except one of the correlations for residents are significant (Table 39). All of these correlations are greater than .660. Examination of the rankings of the rural residents' mean quality ratings for each region reveals that the correlations' interpretation is for all practical purposes identical.

Table 39: Regional Intercorrelations of Rural Resident Respondents' Mean Ratings of Quality of Services in Community

Residents' Region		Residents' Region				
		Region 1	Region 2	Region 3	Region 4	Region 5
Region 1 North Texas	r	1.000	.697*	.745*	.661*	.600
	p		(.0251)	(.0133)	(.0376)	(.0667)
Region 2 West Texas	r		1.000	.939*	.830*	.758*
	p			(.0001)	(.0029)	(.0111)
Region 3 South Texas	r			1.000	.842*	.806*
	p				(.0022)	(.0049)
Region 4 Central Texas	r				1.000	.782*
	p					(.0075)
Region 5 East Texas	r					1.000
	p					

* significant r=correlation p=probability

Table 40 presents the intercorrelations between rural resident respondents and health and human service provider respondents from either the same or different regions. Rural residents and health and human service providers from the same region show a significant and large degree of agreement with one another in all five regions. In fact, only 3 of the 25 correlations are non-significant and these are also relatively large in magnitude (.587 to .609). As previously stated, the magnitude of these correlations is a function of the provider respondents' and resident respondents' agreement on the relative quality of the services provided by the church, school, police, social services, public recreation and public transportation in their communities.

Table 40: Intercorrelations of Rural Resident Respondents' and Health and Human Service Provider Respondents' Mean Ratings of Quality of Services in Community by Region

Residents' Region		Providers' Region				
		Region 1	Region 2	Region 3	Region 4	Region 5
Region 1 North Texas	r	.927*	.875*	.818*	.610	.588
	p	(.0001)	(.0009)	(.0038)	(.0612)	(.0739)
Region 2 West Texas	r	.794*	.863*	.952*	.774*	.842*
	p	(.0061)	(.0013)	(.0001)	(.0085)	(.0022)
Region 3 South Texas	r	.855*	.875*	.976*	.793*	.891*
	p	(.0016)	(.0009)	(.0001)	(.0062)	(.0005)
Region 4 Central Texas	r	.782*	.711*	.903*	.982*	.830*
	p	(.0075)	(.0211)	(.0003)	(.0001)	(.0029)
Region 5 East Texas	r	.588	.632*	.806*	.701*	.964*
	p	(.0739)	(.0498)	(.0049)	(.0239)	(.0001)

* significant r=correlation p=probability

Summary of Characteristics of Respondents' Communities

The majority of the rural resident respondents (52.8%) have lived in their community 21 years or longer, while the majority of health and human service providers have worked in their communities for ten years or less. The respondents' communities tend to be small, but have increased in size at a moderate rate over the past five years. Over 62% of the residents and 66.3% of the providers responded that this change was a result of workers moving in with their families. The majority of the residents (82.1%) felt that these changes were not stressful for them or their families. The providers were unsure (33.9%) or felt that the changes were stressful (30.5%).

Over two-thirds of the respondents felt their communities had experienced economic change in the past 5 years. The majority of resident and provider respondents felt this change had occurred at a moderate rate. Greater than half of these individuals felt that this change improved their community's economic condition. Over ninety percent of the respondents felt that the living conditions in their community were at least adequate. With regard to unemployment, 82.6% of the rural residents and 85.3% of the health and human service providers felt there was a moderate or low rate of unemployment in their community. Similarly, slightly over 50% of the residents and 48.6% of the providers felt there was a low level of poverty in their community, with an additional 36.7% and 42.6% respectively indicating that their community had a moderate poverty level.

Rural residents and health and human service providers were asked to rate the quality of various community services. Overall, churches, schools, fire and libraries were rated as good to very good. Public transportation was considered to be less than fair in quality. However, 69.8% of the residents and 68.5% of the providers reported that public transportation did not exist in their communities. The following services were rated fair to good: police, health services, social services, adult education, and public recreation. Slightly over 37% of the residents reported that adult education was not available in their communities.

Survey Respondents' Perceptions of Stress

Primary Cause of Stress

Rural residents and health and human service providers were asked to respond to the question, "Which things in your life/the lives of your clients cause the most stress?" (Tables 41 and 42). Both residents and providers cited money (N=70 and N=102 respectively) as the most frequent cause of stress and working conditions (N=53 and N=38 respectively) as the second most frequent cause of stress. Forty-four comments were made by rural residents and

BEST COPY AVAILABLE

Table 41. Content Analysis of Rural Resident Respondents' Perceptions of the Causes of the Most Stress in their Lives by Region

Answer Categories	Number of responses by region					Total	Rank of Total
	1	2	3	4	5		
Relationship with spouse	1	2	6	3	7	19	4
Being a parent	5	0	4	3	6	18	5
Relationship with your parent(s)	1	1	2	0	2	6	12
Relationship with relatives	1	0	0	0	2	3	15
Boredom	0	0	1	0	0	1	17
Feeling helpless	0	0	0	0	0	0	18
Loneliness	0	0	2	1	0	3	15
Working hours	0	0	3	0	0	3	15
Pay	0	0	0	1	1	2	16
Working conditions	8	3	15	7	20	53	2
Unemployment	0	0	1	0	4	5	13
Lack of jobs	1	0	1	0	0	2	16
Money	13	3	21	13	22	72	1
Segregation/ discrimination	0	0	1	0	0	1	17
Lack of education	0	0	0	0	0	0	18
Lack of friendships and other support	2	1	3	2	4	12	7
Illness, disability	10	2	10	5	17	44	3
Retirement	0	0	1	0	0	1	17
Life style	0	0	0	0	0	0	18
Weather/climate	3	0	2	1	1	7	11
Isolation	0	3	0	0	1	4	14
Lack of town services	0	0	0	0	1	1	17
Crime	0	0	1	0	1	2	16
Noise	1	0	0	0	0	1	17
Lack of health/social services	0	0	1	1	0	2	16
Housing shortage	0	0	1	0	0	1	17
Differences between oldtimers and newcomers	0	0	0	0	0	0	18
Community problems	1	0	0	0	2	3	15
Job-related concerns	1	0	4	2	2	9	10
Death of a significant other	1	1	1	1	2	6	12
Family problems	5	1	2	4	5	17	6
Societal concerns	0	0	5	2	3	10	9
Time	4	1	1	1	4	11	8
Daily hassles	1	2	2	2	3	10	9
Personal problems	0	0	1	0	1	2	16
Aging	0	0	1	0	1	2	16
Interpersonal relationships	2	0	2	3	4	11	8
Other	5	0	0	1	1	7	11

BEST COPY AVAILABLE

Table 42: Content Analysis of Health/Human Service Provider Respondents' Perceptions of the Causes of the Most Stress in the Lives of Their Clients by Region

Answer Categories	Number of responses by region					Total	Rank of Total
	1	2	3	4	5		
Relationship with spouse	8	2	4	8	9	31	4
Being a parent	8	1	2	6	6	23	6
Relationship with your parent(s)	3	0	0	0	1	4	15
Relationship with relatives	0	1	0	0	1	2	17
Boredom	1	1	2	4	3	11	10
Feeling helpless	0	0	0	0	3	3	16
Loneliness	0	0	3	1	3	7	12
Working hours	0	0	0	0	0	0	19
Pay	0	0	1	1	4	6	13
Working conditions	8	3	7	11	11	38	2
Unemployment	1	1	7	3	13	25	5
Lack of jobs	2	1	1	3	3	10	11
Money	21	5	24	24	29	103	1
Segregation/ discrimination	0	0	1	0	1	2	17
Lack of education	1	0	2	0	2	5	14
Lack of friendships and other support	7	1	3	6	3	20	7
Illness, disability	8	2	10	9	7	36	3
Retirement	0	0	0	0	0	0	19
Life style	0	0	2	0	2	4	15
Weather/climate	2	1	3	0	0	6	13
Isolation	0	0	0	0	1	1	18
Lack of town services	0	0	0	1	1	2	17
Crime	0	1	2	0	0	3	16
Noise	0	0	0	0	[illegible]	0	19
Lack of health/social services	0	0	0	1	2	3	16
Housing shortage	0	0	0	0	0	0	19
Differences between oldtimers and newcomers	1	0	0	0	1	2	17
Community problems	0	0	0	0	0	0	19
Job-related concerns	1	0	0	0	0	1	18
Death of a significant other	0	0	0	0	0	0	19
Family problems	0	0	1	0	0	1	18
Societal concerns	0	0	0	1	0	1	18
Time	0	0	0	0	0	0	19
Daily hassles	1	0	1	0	0	2	17
Personal problems	0	1	7	2	4	14	9
Aging	2	0	5	4	4	15	8
Interpersonal relationships	1	0	1	1	0	3	16
Other	1	0	3	4	2	10	11

BEST COPY AVAILABLE

36 by health and human service providers concerning illness or disability, ranking it the third most frequent cause of stress.

In general, there was a high degree of agreement between what rural resident respondents saw as the greatest stressors in their lives and what health and human service provider respondents perceived as causes of stress in the lives of their clients. Notable exceptions to this pattern of agreement occurred in the areas of job-related concerns, death of a significant other, family problems, societal concerns, time, daily hassles, and interpersonal relationships, all of which were reported as stressors more frequently by residents than by providers, in the areas of boredom, unemployment, lack of jobs, life style, personal problems, and aging, all of which were reported more frequently by providers than by residents.

Respondents' Perception of Social Supports Utilized

Rural residents were asked to identify and rank the people they or someone in their family went to for help when dealing with a difficult personal problem. Residents responded that their spouses, or boy or girl friends (N=69, Table 43) were the individuals they most frequently sought out, whereas counselors (N=36, Table 44) were the least frequently sought out. If respondents sought help from someone not listed in one of the eight categories provided, they were asked to use the category "Other" and specify their answer. The 34 responses in the "Other" category included "God," "myself," "my daughter," and "no one." In general rural residents sought help from their family and friends most frequently and least frequently utilized the helping professional as their preferred source of social support (Table 45).

Table 43: Rank of Persons Most Frequently Sought Out First for Help When Rural Resident Respondent or Rural Resident Respondent's Family Dealt With a Personal Problem

Person	Number of responses	Rank
Spouse	69	1
Friend	17	2
Other Relative	14	3
Parent	12	4
Other	10	5
Minister	9	6
Doctor	4	7
Nurse	1	8
Counselor	1	9

Table 44: Rank of Persons Most Frequently Sought Out Last When Rural Resident Respondent or Rural Resident Respondent's Family Dealt With a Personal Problem

Person	Number of responses	Rank
Counselor	36	1
Nurse	28	2
Other	9	3
Minister	8	4
Parent	7	5
Other Relative	7	6
Doctor	5	7
Spouse	5	8
Friend	4	9

Table 45: Mean Ranking of Persons Most Frequently Sought Out for Help when Rural Resident Respondent or Rural Resident Respondent's Family Dealt With a Personal Problem

Variable	Rank	Mean	Standard deviation	Number of responses
Spouse or boy/girl friend	1	2.17	1.89	121
Friend	2	3.15	1.64	127
Parent	3	3.51	2.01	94
Other relative	4	3.78	1.86	116
Minister, priest, or rabbi	5	4.16	1.99	112
Other	6	4.41	3.20	34
Doctor	7	5.17	1.86	106
Counselor	8	6.45	1.73	93
Nurse	9	6.60	1.49	94

When health and human service providers were queried as to which people their clients sought out most frequently for help with a difficult personal problem, they had a different perspective. Health and human service providers felt their clients would first seek out a friend to help them deal with a major personal problem (Tables 46 and 48). They agreed with the rural resident respondents that counselors would least frequently be sought out as a source of social support by rural Texans (Table 47). However, overall the providers felt that the helping professional was a much more significant source of social support than the rural resident.

This discrepancy between the perceptions of rural resident respondents and those of rural health and human service provider respondents could have several possible explanations. Research in the area of social support systems in rural areas indicates that there is a very active helping network among spouses, friends, and relatives and that this network is effective and preferred.[17,63-66] A second explanation for the low frequency of professional help-seeking could be the lack of health and human service professionals in much of rural Texas.

Table 46: Rank of Persons that Health/Human Service Provider Respondents Felt Their Clients Would Seek Out First for Help When Dealing With a Personal Problem

Person	Number of responses	Rank
Friend	67	1
Spouse	40	2
Nurse	10	3
Doctor	10	4
Minister	9	5
Parent	6	6
Other Relative	4	7
Counselor	3	8
Other	2	9

Table 47: Rank of Persons that Health/Human Service Provider Respondents Felt their Clients would Seek Out Last for Help when Dealing with a Personal Problem

Person	Number of responses	Rank
Counselor	55	1
Other Relative	25	2
Minister	13	3
Parent	11	4
Doctor	11	5
Nurse	10	6
Spouse	3	7
Friend	[illegible]	8
Other	3	9

Table 48: Mean Ranking of Health/Human Service Provider Respondents' Perceptions of Who Their Clients Would Seek Out for Help when Dealing with a Personal Problem

Variable	Rank	Mean	Standard deviation	Number of responses
Friend	1	2.19	1.58	147
Spouse or boy/girl friend	2	2.97	1.92	145
Parent	3	4.39	2.01	140
Minister, priest, or rabbi	4	4.62	1.97	145
Doctor	5	4.87	2.03	145
Other	6	5.21	2.87	24
Other relative	7	5.22	2.03	138
Nurse	8	5.31	2.10	140
Counselor	9	6.33	1.93	145

Rural residents were asked to rank the stress level in their lives as "very stressful," "moderately stressful," or "not very stressful." Sixty-nine point two percent (N=115) of the respondents indicated that their lives were at least moderately stressful. Fifty percent (N=83) viewed their stress level as moderate, while 19.2% (N=32) felt their lives were very stressful overall (Table 49).

Table 49: Rural Resident Respondents' Perception of their Amount of Life Stress

Amount of Stress	Number of responses	Percent
Not very stressful	51	30.7
Moderately stressful	83	50.0
Very stressful	32	19.2
Total	166	100.0

Stressful Life Conditions

The Spearman rank-order correlation coefficient was used to determine the degree of agreement between the rankings of the health and human service provider respondents' and the rural resident respondents' mean ratings of stressful conditions in rural residents' lives. The rankings of the mean ratings for rural residents and health and human service providers appear in Tables 50 and 51 respectively. The rankings of the mean ratings of stressful conditions by providers show a very high and significant degree of association with the rankings of the residents' mean ratings of these conditions ($r=.809$, $p=.0001$). In general, money, unemployment, lack of jobs, pay, being parents, and illness or disability were rated as the most stressful conditions in the lives of rural residents by both groups. In contrast, language problems, relationship with relatives, and lack of education were conditions which were present in the rural resident respondents' lives but considered to be mildly stressful by residents and providers alike. It appears that health and human service providers are aware of the conditions rural residents feel are or are not stress-producing. However, corresponding conditions were typically rated as more stressful by providers than by residents.

Table 50: Rural Resident Respondents' Rank of Stressful Conditions in their Lives

Condition	Rank	Mean	Standard deviation	Number of responses
Money	1	2.42	1.12	139
Working conditions	2	2.36	1.13	93
Lack of jobs	3	2.35	.30	49
Unemployment	4	2.33	1.21	30
Illness, disability	5	2.31	1.22	74
Pay	6	2.27	1.10	98
Being a parent	7	2.24	1.07	115
Feeling helpless	8	2.21	1.06	94
Working hours	9	2.08	1.03	92
Lack of friendships and other support	10	1.95	.97	63
Relationship with spouse	11	1.95	.99	116
Boredom	12	1.91	.98	97
Loneliness	13	1.90	1.00	71
Relationship with your parent(s)	14	1.78	.89	87
Segregation/discrimination	15	1.71	1.10	41
Life style	16	1.67	.76	96
Lack of education	17	1.66	.90	53
Relationship with relatives	18	1.66	.81	117
Self image	19	1.65	.91	99
Retirement	20	1.57	.81	61
Language problems	21	1.43	.80	37

Table 51: Health/Human Service Provider Respondents' Rank of Stressful Conditions in the Lives of their Clients

Condition	Rank	Mean	Standard deviation	Number of responses
Money	1	3.33	.90	144
Unemployment	2	3.20	.92	107
Lack of jobs	3	3.09	1.05	119
Illness, disability	4	2.80	1.11	125
Being a parent	5	2.80	.93	134
Pay	6	2.77	.89	128
Loneliness	7	2.73	1.05	131
Feeling helpless	8	2.69	1.00	130
Relationship with spouse	9	2.51	.96	130
Boredom	10	2.42	1.08	135
Lack of friendships and other support	11	2.37	1.02	118
Working conditions	12	2.32	.91	127
Self image	13	2.31	.99	124
Working hours	14	2.21	.90	120
Retirement	15	2.18	1.04	118
Life style	16	2.09	.98	130
Relationship with your parent(s)	17	2.06	.90	124
Lack of education	18	1.96	.97	124
Language problems	19	1.95	.98	98
Relationship with relatives	20	1.94	.83	135
Segregation/discrimination	21	1.89	.91	116

Table 52 presents the intercorrelations between regions of the rural resident respondents' rankings of the mean ratings of stressful conditions. This table shows that the mean ratings of regions 1 (north Texas) and 2 (west Texas), regions 1 (north Texas) and 5 (east Texas), regions 2 (west Texas) and 3 (south Texas), regions 2 (west Texas) and 5 (east Texas), regions 3 (south Texas) and 4 (central Texas), and regions 3 (south Texas) and 5 (east Texas) were all significantly associated with one another. That is, the rural resident respondents of these pairs of regions felt very similar to one another in terms of their ratings of the stressfulness of various conditions in their lives. Except for the very large correlations between regions 3 (south Texas) and 5 (east Texas), 1 (north Texas)and 5 (east Texas), and 1 (north Texas)and 3 (south Texas), all of the significant rank-order coefficients are of moderate magnitude. In general, it appears that the rural resident respondents in regions 1 (north Texas), 2 (west Texas), 3 (south Texas) and 5 (east Texas) feel similarly about the stressfulness of the various factors listed. Examination of the means shows that they range from 1.0 (not stressful) to slightly above 2.6 (3=moderately stressful) across all five regions. Since all of region 4's (central Texas) correlations except one are low and nonsignificant, it appears that the ranking of the rural resident respondents' mean ratings for this region is very different from that of the other regions.

Table 52: Regional Intercorrelations of Rural Resident Respondents' Mean Ratings of Stressful Conditions in their Lives

Region		Region 1	Region 2	Region 3	Region 4	Region 5
Region 1 North Texas	r	1.000	.534*	.689*	.396	.785*
	p		(.0126)	(.0006)	(.0757)	(.0001)
Region 2 West Texas	r		1.000	.454*	.204	.561*
	p			(.0385)	(.3762)	(.0081)
Region 3 South Texas	r			1.000	.458*	.804*
	p				(.0367)	(.0001)
Region 4 Central Texas	r				1.000	.320
	p					(.1575)
Region 5 East Texas	r					1.000
	p					

* significant r=correlation p=probability

Table 53 contains the correlations between the rankings of the mean ratings of stressful conditions by health and human service provider respondents from different regions. Examination reveals that all of the rank-order correlations are significant. In fact, five of the nine correlations are in the range .766 to .805. There appears to be a very high degree of agreement among providers from different regions as to how stressful they feel conditions are for their clients. In four of the five regions unemployment, money, and lack of jobs were rated as being moderately to very stressful in the rural residents' lives and therefore were ranked no lower than 4.5. Conversely, language problems and relationships with relatives were not felt by the providers to be very stress-provoking for rural residents.

Table 53: Regional Intercorrelations of Health and Human Service Provider Respondents' Mean Ratings of Stressful Conditions in Clients' Lives

Region		Region Region 1	Region 2	Region 3	Region 4	Region 5
Region 1 North Texas	r	1.000	.541*	.792*	.766*	.797*
	p		(.0114)	(.0001)	(.0001)	(.0001)
Region 2 West Texas	r		1.000	.498*	.516*	.592*
	p			(.0215)	(.0167)	(.0047)
Region 3 South Texas	r			1.000	.802*	.805*
	p				(.0001)	(.0001)
Region 4 Central Texas	r				1.000	.855*
	p					(.0001)
Region 5 East Texas	r					1.000
	p					

* significant r=correlation p=probability

Given the large correlation (r=.809) between the rankings of the health and human service provider respondents' and the rural resident respondents' mean ratings collapsed across regions, one would expect a high degree of association between the rankings of the mean ratings of providers and residents cross-classified by regions. Table 54 presents these correlations. As can be seen from this table, there is a significant association between the rankings of the mean ratings of health and human service providers and those of the rural residents from the same region, except for region 2 (west Texas). Since 16 of the 25 possible correlations are significant and are larger than .500 it appears that, in general, health and human service providers and rural residents tend to agree on their ratings of stressful conditions regardless of their region.

Table 54: Regional Intercorrelation of Rural Resident Respondents' and Health and Human Service Provider Respondents' Mean Ratings of Stressful Conditions in their and their Clients' Lives

Providers' Region		Residents' Region				
		Region 1	Region 2	Region 3	Region 4	Region 5
Region 1 North Texas	r	.504*	.539*	.672*	.415	.633*
	p	(.0199)	(.0117)	(.0009)	(.0614)	(.0021)
Region 2 West Texas	r	.400	.185	.555*	.438*	.495*
	p	(.0725)	(.423)	(.0090)	(.0470)	(.0225)
Region 3 South Texas	r	.499*	.579*	.662*	.417	.552*
	p	(.0212)	(.0060)	(.0011)	(.0598)	(.0094)
Region 4 Central Texas	r	.600*	.658*	.784*	.495*	.653*
	p	(.0040)	(.0012)	(.0001)	(.0224)	(.0013)
Region 5 East Texas	r	.783*	.731*	.777*	.417	.837*
	p	(.0001)	(.0002)	(.0001)	(.0603)	(.0001)

* significant r=correlation p=probability

Rural residents were asked whether they felt their lives were high, moderate, or low in stress. Utilizing this question as the independent variable and the mean rating of life stressors as the dependent variable in a one-way analysis of variance yielded a significant group difference. Post-hoc analysis revealed that all three life stress group means were significantly different from one another. As would be expected, the very stressful life group had the largest mean (2.375 where 2=mildly stressful and 3=moderately stressful), followed by the moderate and not very stressful group means (1.675 and 1.235, respectively).

As a result of this finding, the rankings of each of the life stress groups' mean ratings were correlated to determine (1) whether the relative rankings of the three groups were in agreement and the groups simply differed in the magnitude of their mean ratings of the same stressors, or (2) whether in addition to rating the various stressors differently the three groups found different factors more or less stress-producing. These correlations are presented in Table 55.

Table 55: Intercorrelations of Rural Resident Respondents' Mean Ratings of Stressful Conditions in their Lives by Level of Stress in their Lives

Rural Resident Respondents' Life Stress		Rural Resident Respondents' Life Stress		
		High	Moderate	Low
High	r	1.000	.429	.161
	p		(.0525)	(.4854)
Moderate	r		1.000	.622*
	p			(.0076)
Low	r			1.000
	p			

* significant r=correlation p=probability

There is virtually no association between the ranking of the mean ratings of rural residents who considered their lives very stressful and those who felt their lives were low in stress. Although there is a moderate correlation between the high and moderate conditions, it was also nonsignificant. There is, however, a moderately large and significant association between the rankings of the mean ratings of the rural resident respondents who felt their lives were moderate or low in stress.

In general, language problems, retirement, and life style were considered by the rural residents in the latter two groups not to be very stressful factors in their lives. One factor which was ranked in the top three stress-producing conditions for both the moderate and low stress groups was lack of jobs. In fact, in the moderate stress group the top ranked stressor was unemployment, for the low stress group lack of jobs was rated as most stressful. Therefore, there seems to be some agreement between the moderate and low stress groups in terms of what factors they consider stressful and not stressful. In contrast, the high stress group typically rates the same stressors as the other two groups higher and finds different stressors to be the most and least stressful factors in their lives. A one-way analysis of variance found no significant regional differences in terms of rural resident respondents' stress level.

In both the rural resident respondents' rank of stressful conditions in their lives and the health and human service providers' rank of stressful conditions in their clients' lives, money is ranked first in terms of stress. There is evidence to support this perception of money as a primary stressor in a number of areas. Although unemployment has not been as severe in Texas as in other areas of the country, it has become a real problem in at least two of the nonmetropolitan regions. The unemployment rate for Texas as a whole is 5.6, yet region 5 (east Texas) demonstrates a rate of 6.4 and region 3 (south Texas), which incorporates the economic problems of south Texas, has an unemployment rate of 8.2.[87] Unemployment rates of the other nonmetropolitan regions are below the state average of 5.6. Given the high rate of unemployment in regions 3 (south Texas) and 5 (east Texas), it is no wonder that money, lack of jobs, and unemployment are ranked 1, 3 and 4 respectively by the rural resident respondents as important stressors in their lives, while health and human service provider respondents ranked money, unemployment, and lack of jobs as their first, second, and third most important stressors.

Given the high rank of money, lack of jobs, unemployment, and pay (1, 3, 4, and 5 respectively) as important stressors by the rural residents, it is not surprising to find a per capita income level of $6,445.00 for nonmetropolitan residents as compared to a per capita income level of $7,399.00 for metropolitan areas.[57] Although this per capita income level for nonmetropolitan areas reflects a 186% increase since 1970, its relatively low level is self evident.[57] Median family income for nonmetropolitan areas was $17,744.00 in 1980, as compared to $20,080 for metropolitan areas.[57]

Another variable which may support the high ranking of economic stressors by both residents and health and human service providers is the percent of women in the work force. This assumes that more women have entered the labor force as two-family incomes have become necessary to maintain a standard of living that was previously supported primarily by one income. In nonmetropolitan areas, the percent of women in the labor force has risen from 20% in 1950 to 39% in 1980--a 97.5% increase. This compares to a 93% increase in metropolitan areas--from 25% in 1950 to 49% in 1980.[59]

Another indicator of economic stressors in rural areas is the total value of benefits directed to nonmetropolitan areas by the Texas Department of Human Resources. Twenty-six percent of their total benefits (including medical assistance for aged and disabled, families, and children as well as food stamp value and AFDC payments) went to nonmetropolitan areas,[66] although nonmetropolitan residents make up only 20% of the state's population as a whole.[55] Even more striking is the fact that 32% of medical benefits for the aged and disabled went to nonmetropolitan areas, which have 32% of the state's population 65 years and older.[55,66]

In broad economic terms, the priority given to economic stressors by rural residents and health and human service providers alike is surely related to the relative health of rural Texas largest economic activity: agriculture. With significant portions of the state caught in the fourth year of a drought, a conservative estimate of agricultural losses has been calculated at $1 billion. In addition, the freeze of 1983 cost over $400 million in direct economic losses alone.[67] In recognition of these staggering losses, the Secretary of the Texas Department of Agriculture has designated 197 counties as having suffered substantial loss to agricultural production, either because of drought, hurricane or flood, freeze, or because these counties are adjacent to stricken counties or adjacent to suffering counties in other states.[67] Of these counties 158, or 80%, are nonmetropolitan. These counties comprise over 62% of all Texas counties.

Considering the magnitude of loss suffered by agriculture and related industries in Texas, it is probable that the stressor ranked number eight on the residents' and providers' scale of stressors--feeling of helplessness--is also connected to the consecutive years of drought afflicting Texas farmers. It may be that this feeling of helplessness is the consequence of their inability to control one of the most important factors determining their success or failure: the weather. Even the rank of working hours as number nine on the residents' list of stressors may indicate individual attempts to adjust to and compensate for the decreased oil and gas or agricultural production and income.

In regard to economic stressors listed by rural resident respondents and health and human service provider respondents alike as most stressful, it is interesting to note that the three regions with the highest unemployment rates also demonstrated the greatest increase in crime between 1978 and 1983. Regions 2 (west Texas), 3 (south Texas) and 5 (east Texas) had unemployment rates of 4.5, 8.2, and 6.4 respectively,[58] while crime rate increases for these same regions between 1978 and 1983 were 39.6%, 39.2% and 55.0% respectively.[60,61] Although unproven, it is probable that some type of relationship between unemployment and crime increase does exist in these regions.

Besides the high rank given economic stressors by residents and providers, illness or disability was also a stressor emphasized by residents and providers. Ranked 5 and 4 respectively by rural residents and health and human service providers, illness or disability is at least indirectly supported as a significant stressor by secondary data. Although there is little direct information on the rate of illness in nonmetropolitan areas, and information on the extent and kinds of disabilities suffered not only by rural Texas but by Americans in general is sorely lacking, one can make cautious inferences concerning the health of Texans in nonmetropolitan areas by comparing death rates between metropolitan and nonmetropolitan areas and by looking at death rates on a region-by-region basis.

Death rates from all causes for metropolitan and nonmetropolitan areas are 7.3 per 1,000 population and 10.9 per 1,000 population respectively. The range of death rates on a regional basis extends from a high of 13.7 per 1,000 population in region 4 (central Texas) to a low of 8.1 per 1,000 population in region 2 (west Texas), with both rates considerably higher than the metropolitan average of 7.3 per 1,000 population.[56]

Cause-specific death rates also tend to be higher for nonmetropolitan areas than the metropolitan average. For malignant neoplasms, the metropolitan rate is 152.7 per 100,000 population as compared to a nonmetropolitan rate of 210.0 per 100,000 population. Region 4 (central Texas) contained the highest rate, with 258.3 per 100,000 population and region 2 (west Texas) contained the lowest regional death rate, with 140.1 per 100,000 population. Region 5 (east Texas) contained the second highest rate, with 220.9 deaths per 100,000 population.[56]

The rate of death from heart disease is also higher among nonmetropolitan areas than in metropolitan areas. The death rate for heart disease in metropolitan areas is 249.8 deaths per 100,000 population compared to 401.43 deaths per 100,000 population in nonmetropolitan areas. This extends from a high in region 4 (central Texas) of 501.0 deaths per 100,000 population to a low of 272.8 deaths per 100,000 population in region 2 (west Texas). Four of the five nonmetropolitan regions contained death rates due to heart disease above 300.0

deaths per 100,000 population, again considerably higher than the nonmetropolitan rate of 249.8 deaths per 100,000 population.[56]

Also of note, the maternal death rate for metropolitan areas is 4.9 deaths per 100,000 live births, compared with a nonmetropolitan death rate of 11.8 deaths per 100,000 live births.[68]

The death rate in metropolitan areas for cerebrovascular disease is 54.1 deaths per 100,000 population, compared with 97.0 deaths per 100,000 population in nonmetropolitan areas. Again region 4 (central Texas) possessed the highest rate, with 127.3 deaths per 100,000 population, while region 2 (west Texas) contained the lowest rate, with 49.7 deaths per 100,000 population.[56]

Rural residents and health and human service providers were asked how often they felt that the stress experienced by their friends and neighbors or clients was influenced by the variables Age, Race or Ethnic Background, Marital Status, Level of Education, and Total Work Hours. The rural resident respondents felt that marital status (N=154, M=2.69) most frequently influenced stress, and that race or ethnic background (N=152, M=2.19) was the least frequent influence (Tables 56 and 57). However, health and human service provider respondents saw age (N=147, [illegible]=3.45) as the most influential variable and ranked marital status second (N=148, M=3.20) (Tables 58 and 59). They agreed with the rural resident respondents that race or ethnic background did not frequently influence the stress being experienced by their clients. Health and human service providers and rural residents differed greatly, however, on the relative influence of work hours on stress, with the providers ranking it as second to last in terms of influence, while the residents ranked it the second most influential variable.

For both rural resident respondents and health and human service provider respondents, only the analysis of variance of the education factor (residents as respondents) produced a significant F statistic (F=3.218, p=.0146) (Table

60). Post-hoc analysis showed that the significant regional differences in this factor were a result of the mean for region 4 (central Texas) being significantly less than those of regions 2 (west Texas) and 3 (south Texas). That is, residents in region 4 (central Texas) felt that the level of education of their friends was less of a factor in producing stress in their friends' lives than did the residents of regions 2 (west Texas) and 3 (south Texas).

Table 56: Rural Resident Respondents' Perception of Frequency of Stressor

Type of Stressor	Frequency of Stress								Total	
	Frequently		Sometimes		Rarely		Never			
	#	%	#	%	#	%	#	%	#*	%**
Age	17	11.0	74	48.1	47	30.5	16	10.4	154	100.0
Race or ethnic background	11	7.2	48	31.6	44	29.0	49	32.2	152	100.0
Marital status	34	22.5	57	37.7	39	25.8	21	13.9	151	99.9
Level of education	20	13.0	57	37.3	52	34.0	24	15.7	153	100.0
Total work hours	24	15.5	69	44.8	37	24.0	24	15.6	154	100.0

* Total number of responses varies due to missing data.
** percentages rounded

Table 57: Rank Order of Rural Resident Respondents' Perception of the Influence of Certain Variables on Stress

Variable	Rank	Mean	Standard deviation	Number of responses*
Age	3	2.59	0.82	154
Race or ethnic background	5	2.19	0.96	152
Marital status	1	2.69	0.97	154
Level of education	4	2.48	0.91	153
Work hours	2	2.60	0.93	154

* Total number of responses varies due to missing data.

Table 58: Health and Human Service Provider Respondents' Perception of Frequency of Stressor

Type of Stressor	Frequency of Stress								Total	
	Frequently		Sometimes		Rarely		Never			
	#	%	#	%	#	%	#	%	#*	%
Age	77	52.4	60	40.8	9	6.1	1	0.7	147	100.0
Race or ethnic background	26	17.6	73	49.3	44	29.7	5	3.4	148	100.0
Marital status	57	38.5	71	48.0	13	8.8	7	4.7	148	100.0
Level of education	47	32.0	74	50.3	24	16.3	2	1.4	147	100.0
Total work hours	40	27.6	69	47.6	27	18.6	9	6.2	145	100.0

* Total number of responses varies due to missing data.

Table 59: Rank Order of Health and Human Service Provider Respondents' Perception of the Influence of Certain Variables on Stress

Variable	Rank	Mean	Standard deviation	Number of responses*
Age	1	3.45	0.64	147
Race or ethnic background	5	2.81	0.76	148
Marital status	2	3.20	0.79	148
Level of education	3	3.13	0.72	147
Work hours	4	2.97	0.84	145

Table 60: One-Way Analysis of Variance--Regional Differences in Stress Factor Education

Source	Sums of Squares	Degrees of freedom	Mean squares	F	Probability
Between groups	6.3611	4	1.5903	3.218	.0146
Within groups	70.1831	142	.4942		
Total	76.5442	146			

Group Means

	Region 1	Region 2	Region 3	Region 4	Region 5
Means =	3.0667	3.4286	3.4167	2.8485	3.0976
Sample Size =	30	7	36	33	41

Perceptions of Community Stress

Over three quarters of the respondents, 75.6% of the rural residents and 87.3% of the health and human service providers, perceived that there was stress in their communities, while only 10.6% of the residents and 8.7% of the providers felt that there was no stress (Tables 61 and 62). It is interesting to note that not only did a significantly larger percentage of health and human service providers report the presence of community stress, but very few providers (N=6, 4%) were unsure of the presence of stress in their environment. This result was expected due to the nature of the interactions between professional helpers and clients.

Table 61: Rural Resident Respondents' Perceptions of Presence of Stress in their Communities

Respondent's Answer	Number of responses	Percent
Yes, some	121	75.6
I don't know	22	13.8
No, not really	17	10.6
Total	160	100.0

Table 62: Health/Human Service Provider Respondents' Perceptions of Presence of Stress in their Communities

Respondent's Answer	Number of responses	Percent
Yes, some	130	87.3
I don't know	6	4.0
No, not really	13	8.7
Total	149	100.0

Respondents who answered affirmatively to the question about the presence of stress in their communities were asked to rate the level of that stress as high, moderate, or low. Rural resident respondents and health and human service provider respondents had very similar perceptions; 15.4% of residents and 15.2% of providers reported the presence of a high level of stress, while 63.9% of the residents and 71.2% of the providers saw the stress level as moderate and only 20.8% and 13.6% respectively felt the stress level was low (Tables 63 and 64).

Table 63: Rural Resident Respondents' Perceptions of the Level of Stress in their Community

Level of Stress	Number of responses	Percent
High	20	15.4
Moderate	83	63.9
Low	27	20.8
Total	130	100.1

Table 64: Health/Human Service Provider Respondents' Perceptions of the Level of Stress in their Community

Level of Stress	Number of responses	Percent
High	20	15.2
Moderate	94	71.2
Low	18	13.6
Total	132	100.0

Since stress can be helpful as well as harmful, respondents who perceived the presence of stress in their communities were asked for their perception of whether that stress was helpful, both helpful and harmful, or harmful. The majority of respondents, 58.8% of the rural residents and 81.5% of the health and human service providers, perceived the stress in their communities as both helpful and harmful, while only 4.4% of both respondent groups felt it was primarily helpful, 8.9% of providers felt it was harmful, and 16.2% of the residents felt stress was harmful (Tables 65 and 66). Of interest is the fact that 20.6% of the rural residents were unsure of the effects of stressors on their communities, but only 5.2% of providers were unsure.

Table 65: Rural Resident Respondents' Perception of Whether the Stress in their Community is Helpful or Harmful

Respondent's answer	Number of responses	Percent
Helpful	6	4.4
Both helpful and harmful	80	58.8
Harmful	22	16.2
I don't know	28	20.6
Total	136	100.0

Table 66: Health/Human Service Provider Respondents' Perception of Whether the Stress in their Community is Helpful or Harmful

Respondent's answer	Number of responses	Percent
Helpful	6	4.4
Both helpful and harmful	110	81.5
Harmful	12	8.9
I don't know	7	5.2
Total	135	100.0

Both rural residents and health and human service providers were asked to rate how stressful they felt certain conditions were to their communities. These conditions were ranked by their mean ratings and are presented in Table 67 for rural residents and in Table 68 for health and human service providers. Both of these rankings were correlated. In addition, the mean ratings of health and human service provider respondents and rural resident respondents from the five regions were rank ordered. The intercorrelations of these rankings among regions for residents and providers, as well as between residents and providers by region, were computed.

Table 67: Rural Resident Respondents' Mean Ratings of Community Stressors Collapsed Across Regions

Variable	Mean	Standard deviation	Number of responses
Weather/climate	2.162	1.008	142
Lack of health/social services	2.120	1.075	83
Poverty	2.116	1.050	121
Housing shortage	2.034	.999	88
Lack of town services	2.000	.935	81
Differences between "old-timers" and "newcomers"	1.983	1.025	119
Crime	1.871	.936	132
Isolation	1.830	.791	88
Conflict between rural and urban values	1.811	.949	95
Rapid change	1.768	.960	82
Noise	1.615	.879	91
Pollution	1.595	.809	79

Table 68: Health/Human Service Provider Respondents' Mean Ratings of Community Stressors Collapsed Across Regions

Variable	Mean	Standard deviation	Number of responses
Poverty	2.144	.970	104
Weather/climate	2.344	1.029	131
Lack of health/social services	1.667	.822	81
Differences between "old-timers" and "newcomers"	1.386	.651	88
Isolation	2.146	1.019	137
Crime	1.956	.885	136
Housing shortage	1.457	.759	81
Conflict between rural and urban values	2.057	1.118	123
Lack of town services	2.000	.938	101
Rapid change	1.831	.874	59
Pollution	1.847	.842	98
Noise	1.952	.984	105

The rank-order correlation of the mean rating rankings by rural residents and health and human service providers collapsed across regions shows that the rankings of the mean ratings of community stressors by residents and providers are highly and significantly correlated (r=.832, p=.0008). Examination of the rankings of the mean ratings shows that the top three stressors (weather/climate, poverty, and lack of health/social services) are the same for both residents and providers, albeit not in the same order. Further, pollution, noise, and rapid change were considered to be less than "mildly stressful" by both groups.

Table 69 presents the intercorrelations between the rankings of the mean ratings by rural residents from different regions. Only the rank-order correlation between regions 4 (central Texas) and 5 (east Texas) is significant (r=.716, p=.0088). The residents from these two regions rated poverty, lack of health/social services, and differences between old-timers and newcomers as the top community stressors. Although these were the top stress-producing conditions, they were considered to be only mildly to moderately stressful. Further, noise, pollution and rapid change were not considered to be very stressful by the residents of these two regions.

Except for regions 4 (central Texas) and 5 (east Texas), it appears that the community conditions which are most or least stress-producing are specific to a region. For instance, weather/climate is the second greatest stressor in region 2 (west Texas), but given its rank in region 5 (east Texas) (i.e., a rank of 10), it is not considered to be a very stressful factor compared to the other stressors.

Table 69: Regional Intercorrelations of Rural Resident Respondents' Mean Ratings of Community Stressful Conditions

Region		Region 1	Region 2	Region 3	Region 4	Region 5
Region 1 North Texas	r	1.000	.541	.119	.494	.099
	p		(.0695)	(.7119)	(.1027)	(.7597)
Region 2 West Texas	r		1.000	.127	.388	.184
	p			(.6946)	(.2126)	(.5662)
Region 3 South Texas	r			1.000	.431	.507
	p				(.1621)	(.0975)
Region 4 Central Texas	r				1.000	.716*
	p					(.0088)
Region 5 East Texas	r					1.000
	p					

* significant r=correlation p=probability

Table 70 shows the intercorrelation matrix of the rankings of the providers' mean ratings for each of the five regions. The providers from regions 1 (north Texas) and 2 (west Texas), 1 (north Texas) and 3 (south Texas), 2 (west Texas) and 3 (south Texas), and 2 (west Texas) and 5 (east Texas) felt very similar in their ratings of which conditions they considered stressful to their communities. All of these regional pairs had very large (.706 to .812) and significant correlations. The stressors weather/climate, poverty, and lack of health/social services are considered to be the high stressors in these pairs of regions. In addition, noise, pollution, and rapid change were not considered to be community stressors; that is, these factors had mean ratings of less than 1.78 (1=not stressful, 2=mildly stressful) and as a consequence were typically found to be ranked between 10 and 12. More times than not, noise and pollution were considered by the health and human service provider respondents to be less stressful than the other community factors regardless of the provider's region. This also appears to be true of the rural resident respondents, but to a lesser extent.

Table 70: Regional Intercorrelations of Health/Human Service Provider Respondents' Mean Ratings of Community Stressful Conditions

		Region				
Region		Region 1	Region 2	Region 3	Region 4	Region 5
Region 1 North Texas	r	1.000	.812*	.706*	.105	.455
	p		(.0013)	(.0102)	(.7456)	(.1377)
Region 2 West Texas	r		1.000	.766*	.246	.749*
	p			(.0037)	(.4408)	(.0051)
Region 3 South Texas	r			1.000	.161	.573
	p				(.6175)	(.0513)
Region 4 Central Texas	r				1.000	.406
	p					(.1908)
Region 5 East Texas	r					1.000
	p					

* significant r=correlation p=probability

The correlations between health and human service providers and rural residents from different or the same regions are presented in Table 71. Of particular interest here is the degree of association between residents and providers from the same region. In this regard, there was significant agreement between residents and their providers only in regions 2 (west Texas) and 5 (east Texas) (r=.701 and r=.690 respectively). That is, only in these two regions did the two classes of respondents significantly agree with one another on their ratings of what conditions they considered to be stressful, or not stressful, to their communities. For region 2 (west Texas), weather/climate, lack of health/social services and relationships with relatives topped the ranking of community stressors. The mean ratings for each of these factors were relatively the same except for the lack of health/social services factor, where the providers' mean rating was higher than the residents' rating (3.250 vs. 2.220 respectively). Noise and rapid change were factors whose mean ratings by both groups placed them at ranks less than or equal to 11. With regard to region 5 (east Texas), the health and human service provider respondents and rural resident respondents felt similarly about poverty and lack of health/social services. That is, these were considered by both groups to head the list of community stressors, although they were rated as being only a little more than mildly stressful. As previously mentioned, noise and pollution were considered to be not as stressful as the other community stressors.

Table 71: Intercorrelations of Rural Resident Respondents' and Health/Human Service Provider Respondents' Mean Ratings of Stressful Conditions in their Community by Region

Residents' Region		Providers' Region				
		Region 1	Region 2	Region 3	Region 4	Region 5
Region 1 North Texas	r	.298	.347	.642*	-.26667	.028
	p	(.3464)	(.2685)	(.0244)	(.402)	(.9310)
Region 2 West Texas	r	.655*	.701*	.549	.232	.303
	p	(.0208)	(.0111)	(.0643)	(.4673)	(.3387)
Region 3 South Texas	r	.510	.633*	.566	.084	.504
	p	(.0899)	(.0272)	(.0548)	(.7954)	(.0952)
Region 4 Central Texas	r	.494	.359	.708*	.305	.326
	p	(.1027)	(.2516)	(.0101)	(.3355)	(.3015)
Region 5 East Texas	r	.345	.474	.648*	.542	.690*
	p	(.272)	(.1192)	(.0227)	(.0685)	(.0130)

* significant   r=correlation   p=probability

Both rural resident respondents and health and human service provider respondents were asked to indicate the level of stress in their community. This community stress level (high, moderate, or low) was used as a cross-classification variable for the rankings of the mean ratings of stressful conditions for the community.

Table 72 shows the intercorrelations of the rankings of the mean ratings by residents broken down by the community's level of stress. Only the correlation between the low and moderate community stress levels was significant (r=.866, p=.0003). That is, those factors which residents from moderate or low stress level communities rated as very to mildly stressful were similarly ranked. Specifically, rapid change and pollution were rated approximately the same relative to other community stressors, i.e., not as stressful as the other community stress factors. Similarly, weather/climate was rated such that its mean rating placed it near the top of the rankings.

Table 72: Intercorrelation of Rural Resident Respondents' Mean Ratings of Stressful Conditions in their Community by Community's Stress Level

		Community's Stress Level		
Community's Stress Level		High	Moderate	Low
High	r	1.000	.211	.367
	p		(.5113)	(.2399)
Moderate	r		1.000	.866*
	p			(.0003)
Low	r			1.000
	p			

* significant r=correlation p=probability

Table 73 presents the intercorrelations of providers' mean ratings of community stressors by community stress level. Two of the rank-order correlations are significant in this case. Surprisingly, the high and low community stress level rankings were significantly associated (r=.657, p=.0202). Poverty, weather/climate, isolation, noise, and pollution were all rated in such a way that their relative rankings as stressors are similar to one another. The first three are considered more stressful than the other factors listed, whereas the last two are not considered to be as stress-producing as the other stressors. However, the magnitude of the means for each community stress level is higher for the high stress group than for the low community stress group.

The moderate and low community stress groups are also significantly correlated (r=.692, p=.0126). Again, noise and pollution are not considered as stressful as the other factors listed. However, poverty appears to be an important stressor under these two community stress levels.

Table 73: Intercorrelation of Health and Human Service Provider Respondents' Mean Ratings of Stressful Conditions in their Community by Community's Stress Level

		Community's Stress Level		
Community's Stress Level		High	Moderate	Low
High	r	1.000	.385	.657*
	p		(.2170)	(.0202)
Moderate	r		1.000	.692*
	p			(.0126)
Low	r			1.000
	p			

* significant r=correlation p=probability

Table 74 presents the intercorrelation of the rankings of health and human service provider respondents' and rural resident respondents' mean ratings of community stressors by the level of stress in the community. Residents and providers show a high and significant degree of agreement on their ratings of what are and are not high community stressors when they live in communities with a high, moderate, or low degrees of stress.

Table 74: Intercorrelation of the Rankings of Health/Human Service Provider Respondents' and Rural Resident Respondents' Mean Ratings of Stressful Conditions in their Community by Community Stress Level

Community's Stress Level (Health and Human Service Provider)		Community's Stress Level (Rural Resident)		
		High	Moderate	Low
High	r	.632*	.294	.338
	p	(.0276)	(.354)	(.2825)
Moderate	r	.411	.818*	.739*
	p	(.1850)	(.0011)	(.0060)
Low	r	.533	.685*	.718*
	p	(.0742)	(.0139)	(.0085)

* significant r=correlation p=probability

To examine whether the respondents' overall rating of community stressors differed for the three community stress levels, a one-way analysis of variance was conducted for each respondent group. Table 75 presents the source table for rural residents and Table 76 contains the health and human service providers' source table. There were no significant differences between community stress levels. Moreover, the overall mean rating for each stress level is consistent with the community's stress level classification. In contrast, there were significant differences between community stress levels based on the residents' overall mean ratings. Post-hoc analysis revealed that the high community stress level group overall rating of the community stressors was significantly larger than those of the moderate and low community stress level groups. Although the low community stress level group's mean was larger than the moderate group's mean, the difference was nonsignificant. For both respondent groups, the community stress level means varied from between not stressful and mildly stressful to slightly less than moderately stressful (1=not stressful, 2=mildly stressful, 3=moderately stressful).

Table 75: One-Way Analysis of Variance--Community Stress Level by Rural Resident Respondents' Overall Rating of Community Stressors

Source	Sums of squares	Degrees of freedom	Mean squares	F	Probability
Between groups	13.6118	2	6.8059	5.8965*	.0037
Within groups	147.3805	127	1.1605		
Total	160.9923	129			

* significant

Community Stress Level	High	Moderate	Low
Mean =	2.7500	1.8434	1.8889
Sample Size =	20	83	27

Table 76: One-Way Analysis of Variance--Community Stress Level by Health/Human Service Provider Respondents' Overall Rating of Community Stressors

Source	Sums of squares	Degrees of freedom	Mean squares	F	Probability
Between groups	5.2744	2	2.6372	2.273	.1071
Within groups	149.6574	129	1.1601		
Total	154.9318	131			

Community Stress Level	High	Moderate	Low
Mean =	2.200	2.02	1.50
Sample Size =	20	94	18

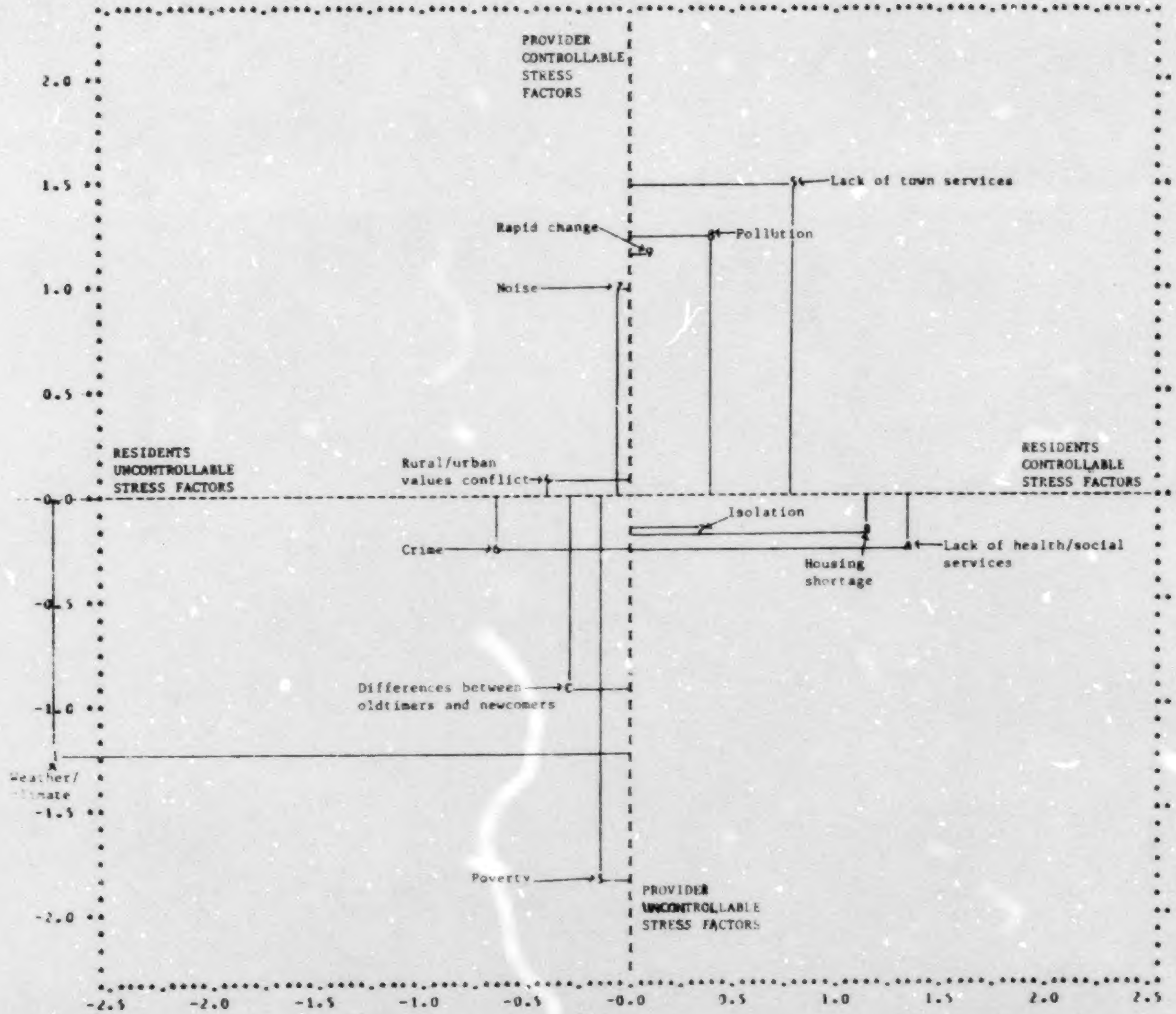
The question dealing with stressful conditions in the community was subjected to multidimensional, individual differences scaling (INDSCAL). Four, three, and two dimensional analyses were performed. In both the four and three dimensional analyses, only two dimensions were found to be of primary importance. Therefore, the two dimensional INDSCAL analysis was interpreted (stress=0.204). INDSCAL's subject weights show that health and human service provider respondents considered dimension II to be more important than dimension I (.81 and .37 respectively), whereas dimension I appears to be more important than dimension II (.34 and .86 respectively) for rural resident respondents.

Examination of the two-dimensional stimuli plot shows that the stimuli differ from one another on the two dimensions with respect to their ability to be controlled by the respondents (Table 77). For example, most people don't feel they can control the condition of weather/climate. In contrast, lack of town services may be influenced by raising taxes or focusing community support on the problem. As a result, these two dimensions were labelled as controllable/uncontrollable factors for rural residents (dimension I) and as controllable/uncontrollable factors for health and human service providers (dimension II). Therefore, it appears that factors residents see as controllable stress factors are different from those health/human service providers see as controllable.

Examination of the residents' controllability dimension and the relative ranking of the stressors reveals that the lack of health and human services is a condition which is both very stressful and yet something which residents feel they can change. In contrast, the condition of weather/climate was also very stressful to residents; however, it was seen as extremely uncontrollable. Residents felt that a shortage of housing was controllable as well as stressful. Factors which rural residents felt were controllable but less stressful included isolation and pollution. Factors which were less stressful and uncontrollable include crime, conflict between urban and rural values, and differences between old-timers and newcomers.

BEST COPY AVAILABLE

Table 77: Results of Multidimensional Individual Differences Scaling (INDSCAL)



Health and human service provider respondents viewed poverty and weather/climate as variables which were extremely uncontrollable and highly stressful. Differences between old-timers and newcomers were also a significant stressor and viewed as uncontrollable. Another very stressful condition which was perceived as somewhat uncontrollable was lack of health and human services. Those conditions which providers viewed as least stressful--noise, pollution, rapid change, and lack of town services--may very well be seen as being controllable. Therefore, for providers there appears to be an association between the perception of control and the level of stress.

Rural health and human service providers were asked if they felt that a significant number of the problems or illnesses they were seeing were related to stress, and if so, about the types of stress related problems or illnesses they were seeing the most. A content analysis was performed on the comments (Table 78). Of those providers who responded affirmatively, money was the stress-related problem most frequently reported by providers. Providers reported gastrointestinal and cardiovascular illnesses as the most frequently seen stress-related illnesses, followed by depression, anxiety, and headaches. Examples of other problems and illnesses included loneliness, burnout, and boredom.

Summary of Survey Respondents' Perceptions of Stressors

Rural Texans perceived their lives to be stressful. In general, both health and human service providers and rural residents responding to the surveys felt that economic conditions were causing the most stress in their lives and the lives of their clients. Specifically they cited conditions such as money and working conditions as the greatest stressors. Both groups of respondents also agreed that illness or disability was a very stressful aspect of their lives.

Table 78: Content Analysis of Stress-Related Problems or Illnesses Most Frequently Seen by Health/Human Service Provider Respondentss

Answer Category	Region 1	2	3	4	5	Total
Job related	1	0	2	3	5	11
Weather/climate	1	0	1	2	0	4
Drug abuse	2	1	5	0	5	13
Crime	1	0	0	1	0	2
Family violence	2	0	1	1	1	5
Money	7	1	4	7	8	27
Weight	2	0	2	3	1	8
Back pain	2	0	0	0	1	3
Cardiovascular disease	9	3	8	4	13	37
Gastrointestinal disease	10	5	11	6	8	40
Headaches	6	0	8	4	4	22
Fatigue	1	0	0	1	0	2
Retirement	1	0	0	0	0	1
Alcohol abuse	2	1	4	0	2	9
Depression	5	1	6	10	2	24
Suicide	0	0	2	0	1	3
Anxiety/nervousness/ crying	4	1	9	4	5	23
Psychological/ neuroses	4	0	2	2	6	14
Age	1	0	2	0	1	4
Pay	0	0	0	0	0	0
Respiratory problems	0	1	1	2	1	5
Friendships and other social supports	1	1	1	1	3	7
Unemployment	0	0	1	0	5	6
Relationship with spouse	1	0	2	2	3	8
Being a parent	1	0	1	0	3	5
Family problems	4	0	0	4	9	17
Diabetes	1	0	0	1	3	5
Skin disorders	0	0	3	1	0	4
Cancer	0	0	1	0	1	2
Other	5	1	1	11	4	22

BEST COPY AVAILABLE

When ranking the perception of social supports utilized by rural residents and their families, rural resident respondents' perceptions differed greatly from those of health and human service provider respondents. Rural residents most frequently reported seeking support from their family and friends and least frequently from counselors, while rural health and human service providers perceived that their clients were utilizing professional support more often.

When presented with a list of 21 conditions to rank in terms of how stressful each was to the individual, there was a high degree of agreement between residents and providers on which conditions were the more stressful. Generally, money, unemployment, lack of jobs, pay, being a parent, and illness or disability were rated as most stressful by both groups. However, providers tended to view each condition as relatively more stressful than did residents.

Rural residents and health and human service providers also concurred on which conditions were less stressful. In addition, residents and providers in different regions of the state maintained similar views on the relative stressfulness of the various conditions. As might be expected, those rural residents who viewed their stress level as high ranked each of the conditions as more stressful than did residents who perceived their lives as either moderately stressful or not very stressful.

Residents and providers reported different perceptions of the relative influence of age, race or ethnic background, marital status, level of education, and work hours on stress. While both groups agreed that race or ethnic background was least frequently a stressful influence, the two groups differed greatly on the influence of age and work hours. Providers felt age was more frequently influential in producing stress and residents reported work hours as the more significant variable.

Most survey respondents indicated that their communities were moderately stressful places to live and that this stress was both helpful and harmful to the welfare of the community. Both residents and providers felt that weather/climate, poverty, and lack of health/human services were the top three community stressors. Both also considered pollution, noise and rapid change as the least stressful conditions. However, the relative rank of stressful community conditions differed on a region by region basis, except for regions 4 and 5 (central and east Texas), which reported similar perceptions. As expected, those respondents reporting high levels of community stress ranked each of the community conditions as more stressful than did respondents living in moderate or low stress communities. When differences between residents' and providers' perceptions of stressful community conditions were viewed multidimensionally, a relationship between the level of stress of a condition and the ability to influence that condition was identified for health and human service providers but not for rural residents.

Rural health and human service providers reported that they were frequently seeing problems and illnesses which were stress related. They identified money as the most frequently encountered problem and gastrointestinal and cardiovascular disease as the most frequently diagnosed illnesses.

Analysis of Interview Data

Demographic Data on Interviewees

Basic demographic data were requested of each interviewee. Of the 125 interviews, five were deleted due to lack of complete information obtained from the interviewees, leaving a total sample of 120 interviews. Of these, 53% (N=64) were conducted with women. More women than men were interviewed in order to offset the preponderance of males responding to the rural residents survey. Interviewees ranged in age from 18 to 95, with 48% of the respondents in the 18-41 age range. Ethnicity was recorded for each respondent: 68% (N=82) were Caucasian, 23% (N=27) were hispanic, 8% (N=10) were black, and 0.8% (N=1) fell into the "Other" category.

Perceptions of Stress Levels in Rural Texas Communities

Interview respondents were asked whether they felt that most people found living in a rural community in Texas stressful. One hundred and seventeen people responded positively to the question. Of those 117 people, 34.2% (N=40) felt life in rural Texas was "real stressful," 46.2% (N=54) felt it was "kind of stressful," and only 19.7% (N=23) felt it was "not very stressful." Therefore, 80.4% of the residents interviewed reported that rural Texas was at least a moderately stressful place to live (Table 79).

Table 79: Interview Respondents' Perception of the Stress Level in Communities in Rural Texas

Level of Stress	Number of responses	Percent
Real stressful	40	34.2
Kind of stressful	54	46.2
Not very stressful	23	19.7
Total	117	100.1*

* percentages rounded

Rural residents were queried as to their perceptions of the impact of ten potentially stressful conditions on their communities. Responses which were more explanatory than a mere yes or no answer were categorized.

Poverty was the condition most frequently cited as a problem (N=107, Table 80). Many respondents said that there was a high rate of poverty in their communities while others felt that, although poverty was present, their communities were not overwhelmingly poor. Respondents indicated that poverty

Table 80: Frequencies of Stressful Community Conditions by Regions for Interviews

Condition	Responses																	
	Region 1 North Texas			Region 2 West Texas			Region 3 South Texas			Region 4 Central Texas			Region 5 East Texas			Totals		
	Yes	No	N.R.	Yes	No	N.R.	Yes	No	N.R.	Yes	No	N.R.	Yes	No	N.R.	Yes	No	N.R.
Differences between oldtimers and newcomers	16	2	4	10	12	3	12	12	1	16	6	3	13	8	3	67	40	14
Isolation	15	5	2	18	6	1	4	21	0	3	21	1	9	13	2	49	66	6
Lack of town services	7	13	2	3	21	1	6	19	0	9	15	1	13	9	2	38	77	6
Poverty	19	1	2	22	3	0	24	1	0	20	4	1	22	2	0	107	11	3
Crime	6	13	3	5	16	4	18	7	0	21	1	3	21	3	0	71	40	10
Noise	1	17	4	5	19	1	2	22	1	5	19	1	8	15	1	21	92	8
Pollution	5	15	2	8	17	0	3	20	1	4	20	1	2	22	0	22	94	4
Rapid change	7	12	3	5	19	1	4	21	0	11	12	2	11	10	3	38	74	9
Lack of health/ social services	9	10	3	11	12	2	13	11	1	20	4	1	16	8	0	69	45	7
Housing shortage	3	15	4	7	14	4	14	9	2	19	3	3	10	13	1	53	49	15

N.R. = No response

tended to be more of a problem among minorities, ranchers and farmers, and single parent households headed by women. Many rural Texans blamed current poverty levels on the drought. The perceptions on poverty of those interviewed tended to remain constant across all regions of the state.

Crime was second most frequently identified (N=71) as influencing community stress. Some rural interviewees commented that crime in their communities was not any worse than anywhere else. Many respondents saw the increase in crime as directly related to poor economic conditions and the poverty rate. Others felt the increase in drug abuse and alcoholism was affecting crime rates.

The third most frequently cited condition was lack of health and human service providers. Respondents reported that most of their communities had basic services but that, because of factors such as recruitment and retainment problems and the high cost of health care, the few providers available were overworked. Respondents felt that they needed more medical specialists and social support services yet indicated that their communities couldn't support additional manpower or facilities. Several respondents reported that their hospitals were already experiencing severe financial problems.

The three most frequently identified sources of community stress were followed by differences between oldtimers and newcomers, housing shortages, isolation, lack of town services, and rapid change. According to the rural Texans interviewed, the least stressful conditions were noise and pollution.

Other sources of community stress frequently identified during the interviews included lack of entertainment and shopping facilities, lack of an adequate economic base in the community, lack of jobs, lack of water, and lack of health/human services, manpower and facilities.

The rural Texans who were interviewed were asked whether or not they felt that their friends and neighbors were experiencing stress. Seventy-three percent (N=86) of those who responded indicated that they felt their friends and neighbors were indeed under stress and 27% felt they were not.

Eleven conditions were identified for each interviewee. During the interview each was asked which of these conditions influenced the level of stress being experienced. The conditions included age, race or ethnic background, marital status, level of education, total work hours, being a parent, lack of jobs, feeling helpless, relationship with spouse, relationships with relatives, and money (Table 81).

Money was most frequently cited as a source of stress (N=76). Those interviewed indicated that tight money was a problem which led to family problems and the feeling of never being able to get ahead.

The lack of jobs was indicated almost as frequently by those interviewed as being a stressor (N=74). Of those who commented about this stressor, 85.7% indicated that the problem was the lack of good jobs such as jobs with the opportunity to advance.

Although seen as stressful by a significant number of interviewees, age was notably less stressful than money or jobs (N=62). The primary concerns seemed to be boredom among youth and that young people find it hard to find work and recreation.

The categories at the mean level of response are the stressors of race or ethnic background (N=52) and feeling helpless (N=52). The indicated problems were that minorities experienced economic stress and lack of jobs and that the class structure was still felt to exist in action, attitude, segregation and discrimination. Even the feeling of helplessness centered around the frustration of not being able to get ahead.

Slightly under the mean level was relationship with spouse (N=49). The most frequent comments were that divorce is increasing in interviewees' communities and that more conflict exists as a result of modern life's stress and

Table 81: Interviewees' Response to Stressful Conditions in the Lives of their Friends and Neighbors

Condition	Responses																	
	Region 1 North Texas			Region 2 West Texas			Region 3 South Texas			Region 4 Central Texas			Region 5 East Texas			Totals		
	Yes	No	N.R.	Yes	No	N.R.	Yes	No	N.R.	Yes	No	N.R.	Yes	No	N.R.	Yes	No	N.R.
Age	10	2	10	8	4	13	6	12	5	18	3	4	20	2	2	62	23	34
Race or ethnic background	5	6	11	12	1	12	7	13	5	11	10	4	17	5	2	52	36	34
Marital status	6	3	14	6	5	14	3	17	5	12	5	6	18	4	2	45	34	41
Level of education	6	2	14	8	3	14	6	13	6	11	11	3	13	6	5	44	35	42
Total work hours	9	0	13	6	3	16	7	11	7	11	10	4	15	2	7	48	26	47
Being a parent	6	4	12	4	9	12	8	7	5	12	9	4	13	6	5	43	35	38
Lack of jobs	10	0	12	10	2	13	18	2	5	18	3	4	18	3	3	74	10	37
Feeling helpless	8	1	13	8	4	13	12	4	9	10	10	5	14	6	4	52	25	44
Relationship with spouse	8	0	14	4	4	17	12	6	7	15	5	5	10	9	5	49	24	48
Relationship with relatives	4	3	15	6	5	14	5	17	3	7	13	5	6	13	5	28	41	42
Money	10	0	12	11	2	12	20	3	2	17	2	6	18	2	4	76	9	36

N.R. = No response

the changing of women's roles. In region 4 (central Texas), there was a specific concern with the incidence of alcoholism and family violence.

Of little significance is the difference in positive response rate to relationship with spouse and total work hours as stressors (N=48). The perceived problems, especially in regions 1 (north Texas), 4 (central Texas), and 5 (east Texas), were long hours or two jobs and two-paycheck families.

Although relationship with spouse had a positive response rate close to the mean, marital status as a stressor was slightly lower (N=45). The divorce rate and the subsequent number of single parents emerged as the primary concerns for those responding.

Notably at the lower end of the positive response rate was level of education as a stressor (N=44). The overwhelming concern was the need for more education to get a better job or to be able to leave. This problem was distributed among all areas of the state.

Conspicuously lower in response was the perceived stress of being a parent (N=43). Of those commenting, 32.5% noted that their community was a good place to raise their children. Twenty-two point five percent of those responding felt that their problems as parents were due to economic stress. The exposure to alcohol and drugs was of lower, but significant, concern.

Remarkably low in indicated stress was relationships with relatives (N=28). Of those perceiving this to be a stressor, the principal concerns were the extended family and loss of the family stability that they had been used to.[86]

Community Services

Rural residents who were interviewed were asked to indicate how they viewed their community services, including social services, health services, schools, churches, public recreation, library, police, fire, public transportation, and adult education (Table 82). The rankings were from " excellent" to "poor" and "service not available." The respondents felt the best about their churches, followed closely by schools and fire departments. The services that the residents seemed the most concerned about due to their fair to poor ranking were public transportation, adult education and public recreation, in ascending order. In many instances, these services were listed as not available (adult education 38.3%, public transportation 32.4%, and public recreation 16.8%). The libraries and police departments were generally seen as being good; health and social services were seen as good to fair. Only fire protection and churches were always available, and only one respondent indicated that no schools were present in the community. Public transportation was the only service to receive no ratings of "excellent," and social services and adult education received only one such rating each.

Summary of Interview Data

Interviews were conducted with randomly selected rural residents in each of 25 typical communities. Slightly more women were interviewed than men. Interviewees ranged in age from 18 to 95 and each of the major ethnic groups was proportionally represented.

Rural residents who were interviewed indicated that they perceived rural Texas as at least a moderately stressful place to live. They viewed poverty, crime, and lack of health and human services as the greatest community stressors.

The majority of those interviewed reported that their friends and neighbors were experiencing significant levels of stress. Money was most frequently cited as being a source of that stress, with lack of jobs and age rated second and third, respectively. Parenthood, level of education, and relationships with relatives were viewed as much less stressful overall.

Table 82: Interviewees' Perceptions of the Quality of Community Services

Service	Excellent		Very good		Good		Fair		Poor		Service not available		Total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Social services	1	0.9	20	17.4	44	38.3	24	29.6	9	7.8	7	6.1	115	100.1
Health services	5	4.4	28	24.8	41	36.3	26	23.0	1	0.9	12	10.6	113	100.0
Schools	21	17.9	53	45.3	26	22.2	10	8.5	6	5.1	1	0.9	117	99.9
Churches	16	14.7	57	52.3	26	23.9	8	7.3	2	1.8	0	0.0	109	100.0
Public recreation	3	2.8	9	8.4	15	14.0	31	29.0	31	29.0	18	16.8	107	100.0
Library	7	6.5	30	28.0	45	42.1	11	10.3	2	1.9	12	11.2	107	100.0
Police	5	4.4	28	24.6	37	32.5	31	27.2	9	7.9	4	3.5	114	100.1
Fire	5	4.4	43	37.7	49	43.0	15	13.2	2	1.8	0	0.0	114	100.1
Public transportation	0	0.0	3	2.8	14	13.0	26	24.1	30	27.8	35	32.4	108	100.1
Adult education	1	0.9	8	7.5	13	12.2	24	22.4	20	18.7	41	38.3	107	100.0

Rural residents who were interviewed were asked to rate the services in their community. In general, churches, schools, and fire departments received the highest rankings and the interviewees were most concerned about their lack of public transportation, adult education, and public recreation.

Summary

This chapter contained the results and a discussion of the data analysis. The results from the rural resident and health and human service provider surveys were reported, followed by the results of the interviews. Summaries of demographic characteristics of both rural resident and health and human service provider respondents, characteristics of the respondents' communities, respondents' perceptions of stressors and of interviews in rural Texas communities were presented. The next chapter will present the conclusions of these findings.

CHAPTER 5: CONCLUSIONS

Within rural Texas is found great diversity, as striking as the contrast between Gulf Coast and Panhandle farmland or piney woods and mesquite-laden plateaus. Rural Texas communities are large and small, old and new, growing, dying, or just standing still. They are rows of quaint wooden frame houses and antique stores, and large modern shopping centers, as well as old dilapidated shells of once bustling downtown areas.

The people are old and young; they may be Czechoslavakian, Irish, Italian, Hispanic, Black, Asian, German, Norwegian or French. They are farmers and ranchers as well as bankers and newspaper editors, but most of all they are rural Texans, and they like being rural Texans.

But within rural Texas is also found great homogeneity. It is a place with almost universal local pride. Rural residents like their towns and they like their lifestyle They enjoy having a close network of friends and family, a place to raise their children, and a place to call home.

Rural communities have a sense of independence and a self-sufficient attitude. Rural Texas communities also face a dilemma because all of Texas is growing and, while growth and change are necessary in many cases for economic survival, they also threaten some of the qualities rural Texans value most about their lifestyle and they are stressful. Today, rural communities face big problems. Statistics confirm that rural Texas has a higher rate of poverty, a lower median family income, and more substandard housing than urban Texas. With agriculture as a major source of revenue, many rural areas have been economically devastated by the weather conditions of the last few years. The combination of a four-year drought and the 1983 freeze has resulted in losses estimated at one billion, 400 million dollars.[67] The rural economy has also been negatively affected by decreasing oil prices and a decreased demand for lumber. Rural Texas has not escaped the impact of what many consider typical urban problems, reporting increases in crime rates, illegitimate births, and juvenile drug and alcohol abuse.[60,61,68,69]

With a lack of both health and human service providers and facilities, rural Texans try to cope with higher death rates and a greater percentage of the elderly among their population.[55,56] Statistics confirm that rural Texas has unique and significant problems, particularly in the areas of economics and health, but how do rural Texans perceive their problems?

A representative sample of rural residents and health and human service providers provided critical insights into both the stressful conditions in the lives of rural Texans and the magnitude of the stress. Residents and providers confirmed the assumption that rural Texans were experiencing significant levels of stress in their lives.

Economic conditions were perceived to be the most significant source of both individual and community stress. This group of stressors included not only money problems, lack of jobs, and poverty, but also working conditions, work hours, and the need in some cases to work more than one job. Rural Texans saw the economic problems as having a negative impact on other facets of their lives, from an increase in family conflicts and alcohol consumption to increasing crime rates and the breakup of the multigenerational farm families.

Illness or disability and the lack of adequate health and human services also constituted significant sources of stress among rural Texans. Information from rural health and human service providers on the types of stress-related illnesses which they encountered contributed specificity to this stress, indicating that gastrointestinal and cardiovascular disease, as well as depression, anxiety, and headaches, were commonly seen stress-related illnesses.

The concept of the natural helping network in the rural community was validated by rural residents, who reported seeking out family and friends most frequently as sources of social support. Further, the majority of rural respondents saw their relationships with their spouses, children, and other relatives as less stressful than might be expected.

Rural Texans described the pace of change in their communities as moderate, indicating that their communities were changing for a variety of reasons but primarily due to economically motivated movement of workers and families. These changes were causing some conflicts, particularly due to differences between old-timers and newcomers, differences between rural and urban values, and the boom/bust phenomenon.

Survey respondents viewed stress as something which was both helpful and harmful to their community, reporting that it could be the impetus for constructive change and also evoke dysfunctional responses and lead to illness. Though they may have differed as to the rank order and relative stressfulness of specific community conditions, all groups of respondents supported the contention that stress is a part of the reality of life in a rural Texas community.

Conclusions

From the information obtained and experience garnered during the survey and interview facets of this study, the following conclusions can be drawn:

1. Stress is present in rural Texas; all groups of respondents--residents, providers, and interviewees--reported moderate to severe levels of stress

in their lives, in the lives of their friends and neighbors, and in their communities.

2. Economic problems in rural Texas are seen as the most frequent cause of stress, with conditions such as money and working conditions consistently ranking as high stressors.
3. Rural Texans utilize friends and relatives most frequently as their social supports.
4. Rural health and human service providers viewed themselves as a more frequently used source of support than did rural residents.
5. Rural residents and health and human service providers have a high degree of agreement on the ranking of stressful conditions in the lives of individuals in rural Texas.
6. Rural health and human service providers and residents view community stressors differently, with providers perceiving controllable conditions as less stressful than uncontrollable conditions. In addition, the factors that residents see as controllable stress factors are different from those seen as controllable by health and human service providers.
7. Rural Texans in north, south and west Texas see weather/climate, poverty, and lack of health and social services as the top three stressors in their communities. In east and central Texas the top three community stressors are poverty, lack of health and social services and differences between old-timers and newcomers.
8. Rural Texans report that illness and disability are significant stressors in their lives. They also report a lack of health/human services, which may be presumed to add to this stress.
9. Noise and pollution are not considered to be particularly stressful conditions by rural Texans.

10. Rural Texans are working long hours and consider working hours to be a significant influence on their stress levels.
11. Rural Texans feel that the quality of their churches, schools, fire services, and libraries is good. Public transportation is seen as being fair or nonexistent.
12. Rural Texans see stress as both helpful and harmful.

This initial research into stress in rural Texas has provided a basis for the identification of rural stressors and a basic understanding of how rural Texans view the impact of certain potentially stressful conditions in their lives. These findings will provide a foundation for focusing and setting priorities for future program endeavors and research projects.

REFERENCES

1. *Rural Health Care and Texas--The Facts, 1982*. Austin: Texas Rural Health Field Services Program, 1983.

2. *Populations and Projections for the State of Texas 1970-2000*. Austin: Texas Department of Water Resources, undated.

3. "Rediscovering Rural America." *Sun Times*, March/April 1982, p. 5.

4. Kanmer, Allen D. et al. "Comparison of Two Modes of Stress Measurement: Daily Hassles and Uplifts Versus Major Life Events." *Journal of Behavioral Medicine* 4:1, 1981, 1-39.

5. Lazarus, Richard S. "Little Hassles Can be Hazardous to Health." *Psychology Today*, July 1981, pp. 58-62.

6. Lazarus, Richard S. and Raymond Launier. "Stress-Related Transactions Between Person and Environment." In *Perspectives in Interactional Psychology*, edited by Lawrence Pervin and Michael Lewis. New York: Plenum Press, 1978.

7. Lazarus, Richard S. and Judith Blackfield-Cohen. "Environmental Stress." In *Human Behavior and Environment: Advances in Theory and Research*, edited by I. Altman and J. F. Wohlwill. New York: Plenum Press, 1977, vol. 2.

8. Kobasa, Suzanne C., Maddi, Salvatore R., and Kahn, Stephen. "Hardiness and Health: A Prospective Study." *Journal of Personality and Social Psychology* 42:1 (1982):168-177.

9. Lazarus, Richard S. "The Stress and Coping Paradigm." In *Models for Clinical Psychopathology*, pp. 177-214, edited by Carl Eisdorfer, Donna Cohen, Arthur Kleinman, and Peter Maxim. New York: S.P. Medical and Scientific Books, 1981.

10. Lazarus, Richard S. and Cohen, Judith Blackfield. "Environmental Stress." In *Human Behavior and Environment: Advances in Theory and Research*, vol. 2, pp. 89-127, edited by I. Altman and J. F. Wohlwill. New York: Plenum Press, 1977.

11. Lazarus, R. S., Cohen, J. B., Folkman, S., Kanmer, A., and Schaefer, C. "Psychological Stress and Adaptation: Some Unresolved Issues." In *Selye's Guide to Stress Research*, vol. 1, pp. 90-117, edited by Hans Selye. New York: Van Nostrand Reinhold Company, 1980.

12. Pechter, Kerry. "How Stressful Is Your Job?" *Prevention*, September 1983, pp. 60-65.

13. Peterson, Norma. "Stress." *Working Woman*, August 1983, pp. 67-69.

14. Caplan, Gerald. "Mastery of Stress: Psychosocial Aspects." *The American Journal of Psychiatry* 138:4 (April 1981):413-420.

15. Hough, Richard Loumis, Ph.D. "Structured Stress, Anemia and Psychological Disorders." University of Illinois, 1969.

16. Bell, Roger A. et al. "Stressful Life Events and Sociodemographic Factors: Predictors of Psychological Disorder." National Institute of Mental Health, Rockville, Maryland.

17. Apte, Judith Katona. "The Relationship Between Blood Pressure Levels, Diet, Weight Perception, Salt Prefernce and Psycho-Social Stress." The University of North Carolina at Chapel Hill, 1980.

18. Cohen, Frances. "Personality, Stress and the Development of Physical Illness." In *Health Psychology: A Handbook*, pp. 77-111, edited by Steve George et al. San Francisco: Jossey-Bass Publishers, 1980.

19. Cohen, Francis and Lazarus, Richard S. "Coping with the Stresses of Illness." In *Health Psychology: A Handbook*, pp. 217-254, edited by G. C. Stone and F. Cohen. San Francisco: Jossey-Bass Publishers, 1979.

20. Dohrenwend, Bruce P. "Life Stress and Illness: Formulation of the Issues." In *Stressful Life Events and Their Contexts*, pp. 1-27, edited by B. S. Dohrenwend and B. P. Dohrenwend. New York: Prodeat, 1981.

21. Hartl, David E. "Stress Management and the Nurse." *Advances in Nursing Science* 1:4, 1979, pp. 91-100.

22. Locke, Steven E. "Stress, Adaptation and Immunity: Studies in Humans." *General Hospital Psychiatry* 4 (1982):49-58.

23. Guzzetta, Cathie E. "Relationship between Stress and Learning." *Advances in Nursing Science* 1:4, 1979, pp. 35-49.

24. Cassel, John. "Physical Illness in Response to Stress." In *Social Stress*, pp. 189-209, edited by Sol Levine and N. A. Scotch. Chicago: Aldine Publishing Company, 1970.

25. Jalowiec, Anne and Marjorie Powers. "Stress and Coping in Hypertensive and Emergency Room Patients." *Nursing Research* 5 (1980):10-15.

26. Holmes, Thomas H. and Richard Rahe. "The Social Readjustment Rating Scale." *Journal of Psychometric Research* 11 (1967):213-218.

27. Woolfolk, Robert L. and Frank C. Richardson, *Stress, Sanity and Survival*. New York: New American Library, 1978.

28. Eckenrode, John and Susan Gore. "Stressful Events and Social Supports: The Significance of Context." In *Social Networks and Social Support*, edited by B. H. Gottlieb. Beverly Hills: Prentice-Hall, 1981.

29. Kobasa, Suzanne C. "Stressful Life Events, Personality, and Health: An Inquiry Into Hardiness." *Journal of Personality and Social Psychology* 37:1 (January 1979):1-11.

30. Chan, Kwok B. "Individual Differences in Reactions to Stress and Their Personality and Situational Determinants: Some Implications for Community Mental Health." Social Science and Medicine, 11(2), January 1977, pp. 89-103.

31. Pearlin, Leonard I. and Schooler, Carmi. "The Structure of Coping." Journal of Health and Social Behavior 19 (March 1978):2-21.

32. Ray, C., Lindop, J. and Gibson, S. "The Concept of Coping." Psychological Medicine 12 (1982):385-395.

33. Numerof, Rita E. Managing Stress. Rockville: Aspen Systems Corporation, 1983.

34. Folkman, Susan and Lazarus, Richard S. "An Analysis of Coping in a Middle-Aged Community Sample." Journal of Health and Social Behavior 21:3 (September 1980):219-239.

35. Lin, Nan, Simeone, Ronald S., Ensel, Walter M., and Wen Kuo. "Social Support, Stressful Life Events, and Illness: A Model and an Empirical Test." Journal of Health and Social Behavior 20 (June 1979):108-119.

36. Gore, Susan. "Stress-Buffering Functions of Social Supports: An Appraisal and Clarification of Research Models." In Stressful Life Events and their Contexts, pp. 203-22, edited by B. S. Dohrenwend and B. P. Dohrenwend. New York: Prodeat, 1981.

37. Flax, James W., Ivens, R. E., Wagenfeld, M. O., and Weiss, R. J. "Mental Health and Rural America: An Overview." Community Mental Health Review 3:5/6 (September/December 1978):1-15.

38. Ozarin, Lucy, M.D. "Mental Health Services in Rural America." Hospital and Community Psychiatry 34:3 (March 1983):197.

39. Dolinsky, Joseph Gary. "Perceived Life Stress: A Function of Rural and Urban Communities, Socioeconomic Status, and Natural Support Systems." California School of Professional Psychology, Fresno, 1982.

40. Dooley, David, Catalano, R., Jackson, R., and Browrell, A. "Economic, Life, and Symptom Changes in a Nonmetropolitan Community." Journal of Health and Social Behavior 22 (June 1981):144-154.

41. Echterling, Lessis G. "A Rural Program for Enhancing Prevention and Intervention Skills." Journal of Rural Community Psychology 2:1 (1981):32-38.

42. Brown, Barry S., Voskuhl, T. L., and Lehman, P. E. "Comparison of Drug Abuse Clients in Urban and Rural Settings." American Journal of Drug and Alcohol Abuse 4:4 (1977):445-454.

43. Webb, Stephen D. and Collette John. "Rural-Urban Differences in the Use of Stress-Alleviative Drugs." American Journal of Sociology 83:3 (November 1977):700-707.

44. Kuczynski, Kay. "New Tensions in Rural Families." *Human Services in the Rural Environment* 6 (3/4), 1981, pp. 54-56.

45. La Godna, Gretchen E. "The Single Rural Woman: Invisible Struggles." *Advances in Nursing Science* 3 (2), 1981, pp. 17-23.

46. Weisz, Robert. "Stress and Mental Health in a Boom Town." In *Boom Towns and Human Services*, edited by Judith Davenport and Joseph Davenport, pp. 31-47. Laramie: University of Wyoming Department of Social Work, 1979.

47. Tevis, Cheryl. "Stress." *Successful Farming*, February 1982, pp. 27-42.

48. Weigel, Randy. *Stress on the Farm*, issues L-2030 through L-2033. College Station: Texas Agricultural Extension Service, 1983.

49. Wise, George W. "Troubleshooting Farm and Family Stress: A Self Help Guide." University of Missouri at Columbia, 1983.

50. Liberman, David and Joel Frank. "Individuals' Perceptions of Stressful Life Events: A Comparison of Native American, Rural, and Urban Samples Using the Social Readjustment Rating Scale." *White Cloud Journal* 1 (4), 1980, pp. 15-19.

51. Hedland, Dalva and Berkowitz, Alan. "The Incidence of Social-Psychological Stress in Farm Families." *International Journal of Sociology of the Family* 9 (July-December 1979):233-243.

52. Miller, Francis T. et al. *Experiences in Rural Mental Health IX: Measuring and Monitoring Stress in Communities.* Chapel Hill: Division of Community Psychiatry, University of North Carolina, 1974.

53. Heyman, Steven R. "Capitalizing on Unique Assets of Rural Areas for Community Interventions." *Journal of Rural Psychology* 3 (1), 1982, pp. 35-46.

54. *Texas Almanac 1981-82*. Dallas: Dallas Morning News, 1983.

55. 1980 Census of the Population: Population and Housing Statistics, Summary Tape File 3A. Washington, DC: U.S. Department of Commerce, 1980.

54. Survey of Rural Residents in Texas. Austin: Texas Rural Health Field Services Program, June 1984.

55. 1980 Census of Population. Summary File 3A.

56. *Texas Vital Statistics 1983*. Austin: Texas Department of Health, 1984.

57. *Median Family Income and Per Capita Income for Texas Counties: 1970 and 1980*. Austin: Bureau of Business Research, University of Texas.

58. *Labor Force Estimates for Texas Counties--5/84*. Austin: Texas Employment Commission, Economic Research and Analysis Division, 1984.

59. *Percent of Women in Labor Force in Texas Counties*. Washington, DC: U.S. Department of Commerce, 1980.

60. *Crime in Texas 1978*. Austin: Texas Department of Public Safety, 1979.

61. *Crime in Texas 1983*. Austin: Texas Department of Public Safety, 1984.

62. *Data Book 1983--Texas State Mental Hospitals, Texas State Schools for the Retarded*. Austin: Texas Department of Mental Health and Mental Retardation, 1983.

63. Bigbee, Jeri L. "Rural Women in the 1980s: Health and Nursing Implications." Independent Study, University of Texas at Austin, 1983.

64. Choi, Thomas, Ph.D. "Health-Specific Family Coping Index for Noninstitutional Care." *American Journal of Public Health* 73:11 (November 1973):1275-1277.

65. Coletta, Nancy. "Stressful Lives: The Situation of Divorced Mothers and Their Children." *Journal of Divorce* 6:3 (Spring 1983):19-31.

66. *Annual Report*. Austin: Texas Department of Human Resources, 1983.

67. Betty, Leland, Texas Department of Agriculture, Austin, Texas. Personal conversation, July 16, 1984.

68. *Live Births by Place of Residence--1983*. Austin: Texas Department of Health, Bureau of Vital Statistics, 1983.

69. *Problem Drinking Profile for September 1981 through August 1982*. Austin: Texas Commission on Alcoholism and Drug Abuse, 1982.

APPENDIX A

Criteria for Use In Determining The Typical Rural County

Criteria for Determination of "Typical" Rural County

I. Average population

II. Race
  A. Race
  B. Spanish origin and race

III. Age
  A. Age by sex (average)
  B. Median age by sex

IV. Composition of household
  A. Persons per household (average)
  B. Persons per family (average)
  C. Type of household
  D. Presence of children

V. Travel time to work

VI. Years of school completed

VII. Occupation (rank of first five)

VIII. Income
  A. Median household income
  B. Median family income
  C. Per capita income

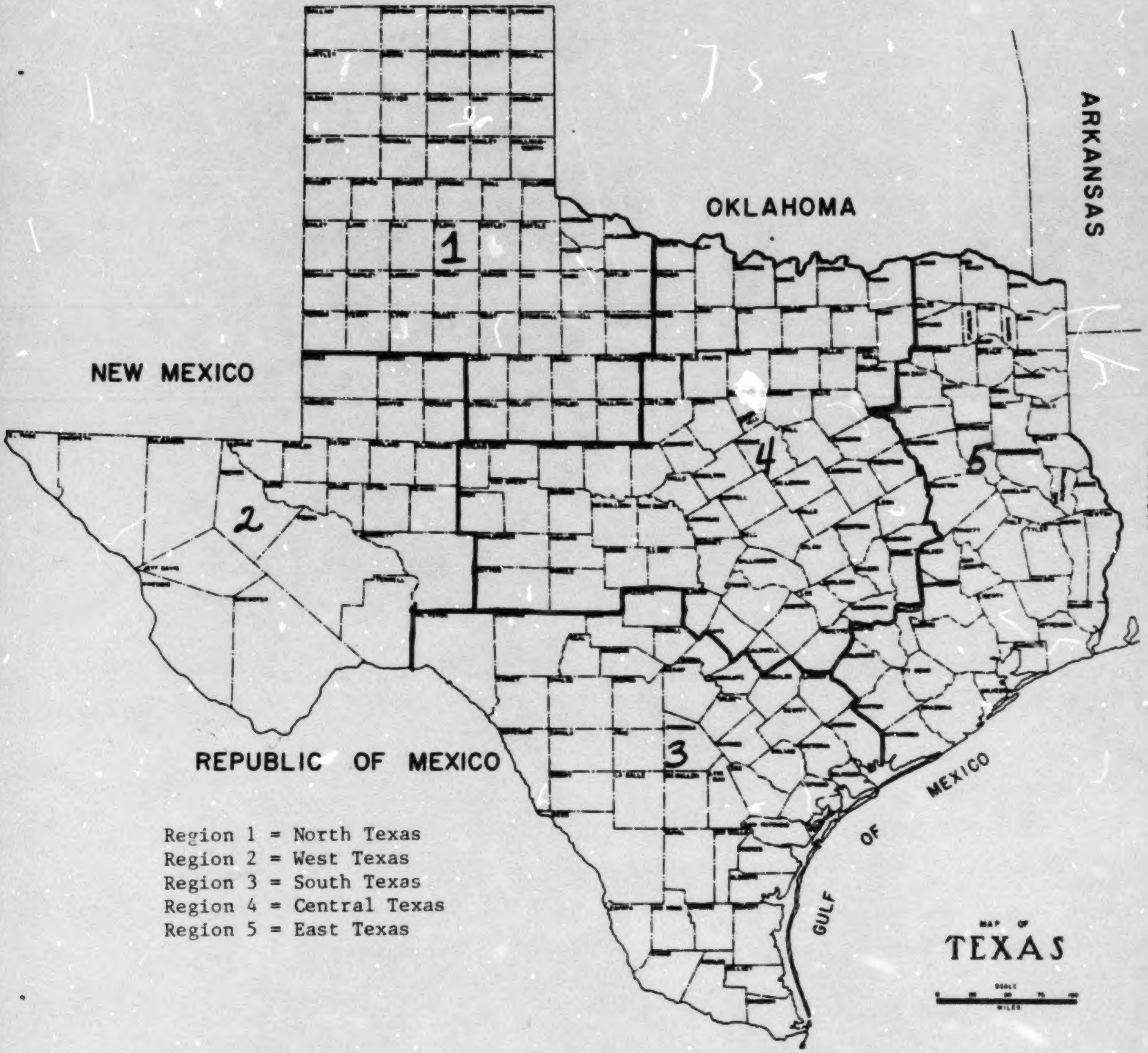
IX. Poverty (percent below poverty level)

X. Housing status
  A. Bathrooms in house

APPENDIX B

Map of Regions

MAP OF REGIONS


1
OKLAHOMA
ARKANSAS
NEW MEXICO
LOUISIANA
4
5
2
REPUBLIC OF MEXICO
3
GULF OF MEXICO
MAP OF
TEXAS
SCALE
MILES

Region 1 = North Texas
Region 2 = West Texas
Region 3 = South Texas
Region 4 = Central Texas
Region 5 = East Texas

APPENDIX C

Survey Questionnaires

A Survey of Stress in the
Rural Texas Environment

Directions

Please answer the following questions by checking or filling in the appropriate spaces. This questionnaire should take about fifteen minutes to complete. Any information you contribute will be anonymous. Again, thank you for your time and invaluable help. (Please refer to the back of the last page for mailing instructions.)

1. Which things in your life cause you the most stress? (please list)

____

____

____

____

2. When you or someone in your family is dealing with a difficult personal problem to whom do you go for help? Rank the following people from 1 to 8 (Example: 1 = the person you most frequently go to for help; 2 = the person you go to next most frequently; 8 = the person you least frequently go to for help). Please use each number only once.

_____ Friend

_____ Spouse or boy/girl friend

_____ Minister, priest or rabbi

_____ Parent

_____ Other relative

_____ Counselor or social worker

_____ Doctor

_____ Nurse

_____ Other (please specify)

____

3. How stressful is your life overall? (check one)

_____ Very stressful _____ Moderately stressful _____ Not very stressful

Survey for Rural Residents
FOR DATA ANALYSIS PURPOSES ONLY

1 2 3 4 5

(TURN OVER, PLEASE)

4. How stressful are the following conditions in your life? For each condition, put a check in the column that most closely describes how stressful that condition is in your life.

Conditions	Condition not present	Condition present, but not stressful	Mildly stressful	Moderately stressful	Very stressful	Rank of very stressful
Relationship with spouse						○
Being a parent						○
Relationship with your parent(s)						○
Relationship with relatives						○
Money						○
Boredom						○
Lack of jobs						○
Feeling helpless						○
Working hours						○
Pay						○
Working conditions						○
Unemployment						○
Segregation/discrimination						○
Language problems						○
Lack of education						○
Self image						○
Lack of friendships and other support						○
Illness, disability						○
Retirement						○
Life style						○
Loneliness						○

If you did not check any conditions as "very stressful," go to question 6. If you did check one or more conditions as "very stressful," go to question 5.

5. Go back to the table in question 4 and look at the conditions which you checked as "very stressful." Now decide which of these "very stressful" conditions is the most stressful, and put a "1" in the circle out to the right of that condition. Put a "2" in the circle to the right of the "very stressful" condition which you think is the next most stressful, and so on until you have ranked all of the conditions you checked as "very stressful."

6. How often do you feel that the stress experienced by your friends or neighbors is influenced by their: (check one for each category below)

a. Age

_____ Frequently _____ Sometimes _____ Rarely _____ Never

b. Race or ethnic background

_____ Frequently _____ Sometimes _____ Rarely _____ Never

c. Marital status

_____ Frequently _____ Sometimes _____ Rarely _____ Never

d. Level of education

_____ Frequently _____ Sometimes _____ Rarely _____ Never

e. Total work hours

_____ Frequently _____ Sometimes _____ Rarely _____ Never

7. Do you feel that there is stress in your community? (check one)

_____ Yes, some (answer questions 8 and 9)
_____ I don't know (skip to question 10)
_____ No, not really (skip to question 10)

8. If you answered yes to question 7, how would you rate the level of stress in your community? (check one)

_____ High stress _____ Moderate stress _____ Low stress

9. Stress can be helpful as well as harmful. For example, the stress of a deadline can cause you to work more effectively; however, stress can also cause illness and injury. Do you see the stress in your community as mainly (check one)

_____ Helpful _____ Harmful
_____ Both helpful and harmful _____ I don't know

You are coming along just fine! The information you are providing is going to be very helpful and we really appreciate your taking the time to continue with this survey.

(TURN OVER, PLEASE)

10. How stressful are the following conditions to your community? For each condition, put a check in the column that most closely describes how stressful that condition is in your community.

Conditions	Condition not present	Condition present, but not stressful	Mildly stressful	Moderately stressful	Very stressful	Rank of very stressful
Weather/climate						○
Isolation						○
Poverty						○
Conflict between rural and urban values						○
Lack of town services (water, electricity, police, fire)						○
Crime						○
Noise						○
Pollution						○
Rapid change						○
Lack of health/social services						○
Housing shortage						○
Differences betweeen "old-timers" and "newcomers"						○

If you did not check any conditions as "very stressful," go to question 12. If you did check one or more conditions as "very stressful," go to question 11.

11. Go back to the table in question 4 and look at the conditions which you checked as "very stressful." Now decide which of these "very stressful" conditions is the most stressful, and put a "1" in the circle out to the right of that condition. Put a "2" in the circle to the right of the "very stressful" condition which you think is the next most stressful, and so on until you have ranked all of the conditions you checked as "very stressful."

* * * * * * * * * * * * *

To help us better understand the impact of stress on different people and communities in rural Texas, we would like for you to give us some information about yourself and your community. Please remember that this information will be kept confidential.

12. What is your age? (check one)

____ 18-24 years
____ 25-29 years
____ 30-39 years
____ 40-49 years
____ 50-59 years
____ 60 years or over

13. What is your sex? (check one)

_____ Male

_____ Female

14. What is your race or ethnic group? (check one)

_____ Hispanic

_____ Black

_____ Caucasian

_____ Asian American

_____ American Indian

_____ Other (please specify) ______________

15. What is your marital status? (check one)

_____ Married

_____ Never married

_____ Divorced

_____ Separated

_____ Remarried

_____ Living together

_____ Widowed

16. How many children do you have? (check one)

_____ None

_____ 1

_____ 2-3

_____ 4 or more

17. Which of the following best describes your present living situation? (check one)

_____ Married, living only with spouse

_____ Married, living with spouse and children

_____ Single parent, male

_____ Single parent, female

_____ Live alone

_____ Other (please specify) ____

18. Who else lives in your home? (please check all answers that apply)

_____ Parent or parents

_____ Other relative

_____ Friends

_____ Other children (not your own)

(TURN OVER, PLEASE)

19. What is the highest level of education you have completed? (check one)

_____ Less than 7th grade
_____ Junior high (9th grade)
_____ Partial high school (10th or 11th grade)
_____ High school graduate
_____ Partial college or special training (at least one year)
_____ College or university education
_____ Graduate degree

20. How many hours do you work each week for income? (check one)

_____ Unemployed
_____ Unemployed and seeking employment
_____ 20 or less
_____ 21-40
_____ 41-50
_____ 51-60
_____ 61-70
_____ 71-80
_____ Over 80
_____ Retired

21. How long have you lived in your community? (check one)

_____ 6 months or less
_____ 7-11 months
_____ 1-2 years
_____ 3-5 years
_____ 6-10 years
_____ 11-20 years
_____ 21 years or longer

22. What is the size of your community? (check one)

_____ Small community _____ Moderate community _____ Large community

23. Do you think that the size of your community has changed much during the last five years? (check one)

_____ Yes, it has increased (answer questions 24 through 26)
_____ Yes, it has decreased (answer questions 24 through 26)
_____ No, it has not changed much (skip to question 27)

24. If you answered yes to question 23, have these changes in the number of people in your community been (check one)

_____ Very fast
_____ Fast
_____ Moderate
_____ Slow
_____ Very slow

25. Has the number of people in the community changed because (check one)

_____ Workers and their families have moved in

_____ Retirees have moved in

_____ Hometown kids have left

_____ Local families have left

_____ Other (please specify) ____

26. Have the changes in your community been stressful for you and your family? (check one)

_____ Yes _____ No _____ I don't know

27. Has the economic condition of your community changed greatly during the last five years? (check one)

_____ Yes, my community is in better economic condition (answer question 28)

_____ Yes, my community is in worse economic condition (answer question 28)

_____ No, the economic condition of my community has not changed (skip to question 29)

28. If you answered yes to question 27, have these economic changes been (check one)

_____ Very fast

_____ Fast

_____ Moderate

_____ Slow

_____ Very slow

29. What are the living conditions like for the majority of people in your community? (check one)

_____ Excellent

_____ Good

_____ Adequate

_____ Poor

_____ Terrible

30. What is the level of unemployment in your community? (check one)

_____ High

_____ Moderate

_____ Low

_____ None (there is no unemployment)

31. What is the level of poverty in your community? (check one)

_____ High

_____ Moderate

_____ Low

_____ None (there is no poverty)

(TURN OVER, PLEASE)

32. For each of the services listed below, please check the answer that best describes the quality of the service in your community.

	Excellent	Very good	Good	Fair	Poor	Service not available
Social services						
Health services						
Schools						
Churches						
Public recreation						
Library						
Police						
Fire						
Public transportation						
Adult education						

Thank you again for your invaluable help. Please fold this questionnaire in half along the dotted line with the address showing on the outside; then staple or tape it shut, stamp, and mail by April 25, 1984.

Stamp

Karen Mountain, R.N., M.S.N.
Project Coordinator
Texas Rural Health Field Services Program
2609 University Avenue
Austin, TX 78712

A Survey of Stress in the
Rural Texas Environment

Directions

Please answer the following questions by checking or filling in the appropriate spaces. This questionnaire should take about fifteen minutes to complete. Any information you contribute will be anonymous. Again, thank you for your time and invaluable help. (Please refer to the back of the last page for mailing instructions.)

1. Which things in your clients' lives do you feel cause them the most stress? (please list)

____
____
____
____
____
____
____

2. When one of your clients is dealing with a difficult personal problem to whom do they go for help? Rank the following people from 1 to 8 (Example: 1 = the person they most frequently go to for help; 2 = the person they go to next most frequently; 8 = the person they least frequently go to for help). Please use each number only once.

_____ Friend
_____ Spouse or boy/girl friend
_____ Minister, priest or rabbi
_____ Parent
_____ Other relative
_____ Counselor or social worker
_____ Doctor
_____ Nurse
_____ Other (please specify)
____

Survey for Rural
Health/Human Service Providers
FOR DATA ANALYSIS PURPOSES ONLY

1 2 3 4 5

(TURN OVER, PLEASE)

3. In general, how stressful are the following conditions in your clients' lives? For each condition, put a check in the column that most closely describes how stressful that condition is in your clients' lives.

Conditions	Condition not present	Condition present, but not stressful	Mildly stressful	Moderately stressful	Very stressful	Rank of very stressful
Relationship with spouse						○
Being a parent						○
Relationship with your parent(s)						○
Relationship with relatives						○
Money						○
Boredom						○
Lack of jobs						○
Feeling helpless						○
Working hours						○
Pay						○
Working conditions						○
Unemployment						○
Segregation/discrimination						○
Language problems						○
Lack of education						○
Self image						○
Lack of friendships and other support						○
Illness, disability						○
Retirement						○
Life style						○
Loneliness						○

If you did not check any conditions as "very stressful," go to question 5. If you did check one or more conditions as "very stressful," go to question 4.

4. Go back to the table in question 4 and look at the conditions which you checked as "very stressful." Now decide which of these "very stressful" conditions is the most stressful, and put a "1" in the circle out to the right of that condition. Put a "2" in the circle to the right of the "very stressful" condition which you think is the next most stressful, and so on until you have ranked all of the conditions you checked as "very stressful."

5. How often do you feel that the stress experienced by your clients is influenced by their: (check one for each category below)

a. Age

_____ Frequently _____ Sometimes _____ Rarely _____ Never

b. Race or ethnic background

_____ Frequently _____ Sometimes _____ Rarely _____ Never

c. Marital status

_____ Frequently _____ Sometimes _____ Rarely _____ Never

d. Level of education

_____ Frequently _____ Sometimes _____ Rarely _____ Never

e. Total work hours

_____ Frequently _____ Sometimes _____ Rarely _____ Never

6. Do you feel that there is stress in your community? (check one)

_____ Yes, some (answer questions 7 and 8)
_____ I don't know (skip to question 9)
_____ No, not really (skip to question 9)

7. If you answered yes to question 6, how would you rate the level of stress in your community? (check one)

_____ High stress _____ Moderate stress _____ Low stress

8. Stress can be helpful as well as harmful. For example, the stress of a deadline can cause you to work more effectively; however, stress can also cause illness and injury. Do you see the stress in your community as mainly (check one)

_____ Helpful _____ Harmful
_____ Both helpful and harmful _____ I don't know

You are coming along just fine! The information you are providing is going to be very helpful and we really appreciate your taking the time to continue with this survey.

(TURN OVER, PLEASE)

9. How stressful are the following conditions to your community? For each condition, put a check in the column that most closely describes how stressful that condition is in your community.

Conditions	Condition not present	Condition present, but not stressful	Mildly stressful	Moderately stressful	Very stressful	Rank of very stressful
Weather/climate						○
Isolation						○
Poverty						○
Conflict between rural and urban values						○
Lack of town services (water, electricity, police, fire)						○
Crime						○
Noise						○
Pollution						○
Rapid change						○
Lack of health/social services						○
Housing shortage						○
Differences betweeen "old-timers" and "newcomers"						○

If you did not check any conditions as "very stressful," go to question 11. If you did check one or more conditions as "very stressful," go to question 10.

10. Go back to the table in question 4 and look at the conditions which you checked as "very stressful." Now decide which of these "very stressful" conditions is the most stressful, and put a "1" in the circle out to the right of that condition. Put a "2" in the circle to the right of the "very stressful" condition which you think is the next most stressful, and so on until you have ranked all of the conditions you checked as "very stressful."

11. Do you feel that a significant amount of the problems or illnesses you are seeing are related to stress? If yes, what types of stress-related problems or illnesses are you seeing most? (please list)

____

____

____

____

____

____

12. What is your profession? (check one)

_____ Physician
_____ R.N., L.V.N., P.A.
_____ E.C.A., E.M.T., paramedic
_____ Dentist
_____ Social worker
_____ Psychologist or counselor
_____ Administrator
_____ Pharmacist
_____ Other (please specify) ____

13. How long have you worked in your community? (check one)

_____ 6 months or less
_____ 7-11 months
_____ 1-2 years
_____ 3-5 years
_____ 6-10 years
_____ 11-20 years
_____ 21 years or longer

14. What is the size of your community? (check one)

_____ Small community _____ Moderate community _____ Large community

15. Do you think that the size of your community has changed much during the last five years? (check one)

_____ Yes, it has increased (answer questions 16 through 18)
_____ Yes, it has decreased (answer questions 16 through 18)
_____ No, it has not changed much (skip to question 19)

16. If you answered yes to question 15, have these changes in the number of people in your community been (check one)

_____ Very fast
_____ Fast
_____ Moderate
_____ Slow
_____ Very slow

17. Has the number of people in the community changed because (check one)

_____ Workers and their families have moved in
_____ Retirees have moved in
_____ Hometown kids have left
_____ Local families have left
_____ Other (please specify) ____

(TURN OVER, PLEASE)

18. Have the changes in your community been stressful for your clients? (check one)

_____ Yes   _____ No   _____ I don't know

19. Has the economic condition of your community changed greatly during the last five years? (check one)

_____ Yes, my community is in better economic condition (answer question 20)

_____ Yes, my community is in worse economic condition (answer question 20)

_____ No, the economic condition of my community has not changed (skip to Question 21)

20. If you answered yes to question 19, have these economic changes been (check one)

_____ Very fast
_____ Fast
_____ Moderate
_____ Slow
_____ Very slow

21. What are the living conditions like for the majority of people in your community? (check one)

_____ Excellent
_____ Good
_____ Adequate
_____ Poor
_____ Terrible

22. What is the level of unemployment in your community? (check one)

_____ High
_____ Moderate
_____ Low
_____ None (there is no unemployment)

23. What is the level of poverty in your community? (check one)

_____ High
_____ Moderate
_____ Low
_____ None (there is no poverty)

24. For each of the services listed below, please check the answer that best describes the quality of the service in your community.

	Excellent	Very good	Good	Fair	Poor	Service not available
Social services						
Health services						
Schools						
Churches						
Public recreation						
Library						
Police						
Fire						
Public transportation						
Adult education						

Thank you again for your invaluable help. Please fold this questionnaire in half along the dotted line on the back of this page with the address showing on the outside; then staple or tape it shut, stamp, and mail by May 1, 1984.

(TURN OVER, PLEASE)

- -

Stamp

Karen Mountain, R.N., M.S.N.
Project Coordinator
Texas Rural Health Field Services Program
2609 University Avenue
Austin, TX 78712

APPENDIX D

Structured Interview Form

Community name: ______________________ Regional code: 1 2 3 4 5

Stressors in the Rural Environment
Interview Form

Introduction
Salutation
Introduce self (present card)

The Texas Rural Health Field Services Program, a program at the University of Texas, would like your help in learning about the effects of stress in rural Texas. Stress is very complicated, with both positive and negative results. Trouble is, most of what we know about stress has been learned from research done on city dwellers in urban environments.

I would like to take a few minutes of your time to ask you some questions about your community.

1. Most people consider (this community) to be rural, and people in other rural communities like this one have expressed concern about the stress in their towns. Do you think that most people find living in a rural community in Texas stressful?

   If yes, ask how stressful. Is it:
   real stressful? _____
   kind of stressful _____
   not very stressful _____

   If no, go to question 2.

2. People in other communities like yours have found some of these conditions to be stressful. Is (name condition) a problem here?

   a. Differences between "old-timers" and "newcomers"

   b. Isolation

   c. Lack of town services (water, electricity, police, fire)

   d. Poverty

   e. Crime

   f. Noise

   g. Pollution

h. Rapid change

i. Lack of health/social services

j. Housing shortage

3. What are some other stresses in your community?

4. Do you feel that your friends and neighbors are experiencing stress?

Yes _____ No _____

If yes, ask Do you feel that the stress being experienced by your friends and neighbors is influenced by things like their:

a. Age

b. Race or ethnic background

c. Marital status

d. Level of education

e. Total work hours

f. Being a parent

g. Lack of jobs

h. Feeling helpless (like they can't change things)

i. Relationship with spouse

j. Relationships with relatives

k. Money

5. I'd like to ask you about some of the services in this community. Would you please tell me whether you think the quality of (name of service) is excellent, very good, good, fair, poor, or not available.

	Excellent	Very good	Good	Fair	Poor	Service not available
Social services						
Health services						
Schools						
Churches						
Public recreation						
Library						
Police						
Fire						
Public transportation						
Adult education						

Demographic Data

6. Sex of respondent

_____ Male

_____ Female

7. Age of respondent

_____ Age

8. Race or ethnic group of respondent

_____ Caucasian

_____ Hispanic

_____ Black

_____ Other